

Preparing for the Examination

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This chapter is intended for use when you are ready to start revising for your examination. It contains:

- a summary of useful revision techniques;
- details of the format of the examination.

# **Revision technique**

# **Planning**

The first thing to say about revision is that it is an addition to your initial studies, not a substitute for them. In other words, don't coast along early in your course in the hope of catching up during the revision phase. On the contrary, you should be studying and revising concurrently from the outset. At the end of each week, and at the end of each month, get into the habit of summarising the material you have covered to refresh your memory of it.

As with your initial studies, planning is important to maximise the value of your revision work. You need to balance the demands of study, professional work, family life and other commitments. To make this work, you will need to think carefully about how to make best use of your time.

Begin as before by comparing the estimated hours you will need to devote to revision with the hours available to you in the weeks leading up to the examination. Prepare a written schedule setting out the areas you intend to cover during particular weeks, and break that down further into topics for each day's revision. To help focus on the key areas try to establish:

- which areas you are weakest on, so that you can concentrate on the topics where effort is particularly needed;
- which areas are especially significant for the examination the topics that are tested frequently.

Don't forget the need for relaxation, and for family commitments. Sustained intellectual effort is only possible for limited periods, and must be broken up at intervals by lighter activities. And don't continue your revision timetable right up to the moment when you enter the exam hall: you should aim to stop work a day or even 2 days before the exam. Beyond this point the most you should attempt is an occasional brief look at your notes to refresh your memory.

# Getting down to work

By the time you begin your revision you should already have settled into a fixed work pattern: a regular time of day for doing the work, a particular location where you sit, particular equipment that you assemble before you begin and so on. If this is not already a matter of routine for you, think carefully about it now in the last vital weeks before the exam.

You should have notes summarising the main points of each topic you have covered. Begin each session by reading through the relevant notes and trying to commit the important points to memory.

Usually this will be just your starting point. Unless the area is one where you already feel very confident, you will need to track back from your notes to the relevant chapter(s) in the *Learning System*. This will refresh your memory on points not covered by your notes and fill in the detail that inevitably gets lost in the process of summarisation.

When you think you have understood and memorised the main principles and techniques, attempt an exam-standard question. At this stage of your studies you should normally be expecting to complete such questions in something close to the actual time allocation allowed in the exam. After completing your effort, check the solution provided and add to your notes any extra points it reveals.

# Tips for the final revision phase

As the exam looms closer, consider the following list of techniques and make use of those that work for you:

- Summarise your notes into more concise form, perhaps on index cards that you can carry with you for revision on the way into work.
- Go through your notes with a highlighter pen, marking key concepts and definitions.
- Summarise the main points in a key area by producing a wordlist, mind map or other mnemonic device.
- On areas that you find difficult, rework questions that you have already attempted, and compare your answers in detail with those provided in the *Learning System*.
- Rework questions you attempted earlier in your studies with a view to producing more 'polished' answers (better layout and presentation earn marks in the exam) and to completing them within the time limits.
- Stay alert for practical examples, incidents, situations and events that illustrate the material you are studying. If you can refer in the exam to real-life topical illustrations you will impress the examiner and earn extra marks.

# The format of the examination

# Structure of the paper

The examination paper for Financial Management has two sections:

- 1. Section A will be a compulsory section for 50 marks, containing five 10 marks questions.
- 2. Section B will be a compulsory section for 50 marks, containing two questions of 25 marks each, or one case study style question for 50 marks.

Any changes in the structure of the examination or in the format of questions will be indicated well in advance in the appropriate CIMA journals.

# How to tackle the examination

There are a number of general points that are relevant to sitting the *Financial Management* examination.

• *Examination pressure.* We have all sat examinations at some point in our lives. They are unusual situations; the body and mind can behave in strange and sometimes uncontrollable ways. You need to be able to overcome this examination room pressure in order to deliver and show the examiner that you are worthy of passing the examination.

You will need plenty of practice of questions under time constraints, and should practise 'mock' examinations. It is also important to have a rest and proper sleep the night before the exam.

• *Timing.* A common mistake made by students is the failure to allocate time properly. While it is easy to become engrossed in a complex numerical question, it is imperative that time available for the whole examination is allocated between the different questions.

Reading time of 20 minutes is allocated to F2 and during this time you may study the exam paper and make annotations on the exam paper, but are prohibited from writing on your answer paper until instructed to do so by the exam invigilator. It is important to use this time effectively. When practising the mock exam questions, allow yourself the 20 minutes reading time and decide how best to use it prior to the exam.

You have 1.8 minutes per mark and should allocate time to questions on this basis. Most marks are obtained within the time allocation and the question should be left when this time has run out. Excessive time applied to a question will almost certainly produce a diminishing return in terms of marks awarded. Any time savings achieved on questions may be used to return to the unfinished questions at the end.

It is essential to answer all the questions required, if you are to stand a reasonable chance of passing.

The manner in which you tackle questions is important. Attempting the question you know best first is advisable. In sections of the examination which involve little choice you must select the questions that best reflects your abilities, but not waste time deciding which questions these are.

- *Planning*. In order to overcome examination pressure and time pressure, it is a good idea to train yourself to plan answers before writing. You should prepare across the full syllabus and not rely on 'question-spotting'.
- *Understanding the questions.* Students sometimes fail because they give a good answer to the 'wrong' question.

It is essential that you read the question carefully to ensure a full understanding of what is required.

Time should not be wasted in a detailed reading of a lengthy practical question. You should become practised at scanning these questions to extract the fundamental background, the structure involved and the detailed requirements.

You should first look at the requirements of the question. Second, gain an appreciation of any complications caused by structure, organisation or circumstances. Third, discover any major factors which will require a modified approach to the question.

Do not just write everything you know about a subject; this may cause you to overrun on time for that question and will give the impression to the marker that you don't fully understand the question and the key issues. And if there are marks for the format (there are not normally any more than 2 marks attributed to format in this exam) of your answer, make sure you comply with the instructions – report format or memorandum, for example.

- Working calculations. Whatever the form of the question, all calculations and adjustments should be written out carefully. Credit is given in examinations for workings, even where you may have inserted the wrong figure in the final answer.
- Presentation. A high standard of presentation is an essential quality of a professional accountant. This applies not only to clarity and neatness in both the solutions and workings, but to presentation of answers in accordance with generally accepted accounting practice, for example, formats followed in accordance with IAS 1 (revised) and IAS 7, and the absence of abbreviations in statements of financial position and income statements.
- *Quality of English.* Frequent comment is made by examiners about the poor standards of written English. All that is required is care with the written parts of the examination. Some forethought and planning of answers will reap benefits in clarity of writing.

Examiners have often stressed that students should avoid contentious remarks such as 'obviously'. These words should be used very carefully. If something is obvious, why state it? This does not mean to say that an answer should not include the obvious, but it is better not to say that it is! In any case, very often what actually follows the word 'obviously' is far from so. Another example is the report which ends with a phrase along the lines of 'I hope that this has clarified the situation', or 'Do not hesitate to contact me if you require further clarification'. Avoid these terms, as all too often they indicate muddled thinking.

# Revision Questions

# **Section A**

The following questions are those that reflect exam standard questions worth 10 marks. These cover all 4 sections of the syllabus and combine numerical and narrative components.

# Question 1

(a) Pot owns all the share capital of Noodle. The following information is extracted from the individual statements of financial position of the two entities on 31 December 20Y0:

	Pot	Noodle
	\$	\$
Current assets	400,000	350,000
Current liabilities	250,000	100,000

The receivables of Pot include \$40,000 receivable from Noodle, while the payables of Noodle include \$25,000 payable to Pot. The difference is accounted for by cash in transit.

# Requirement

If there are no other intra-group balances, what is the value of the net current assets in the consolidated statement of financial position of Pot? (3 marks)

(b) Peter owns 75% of the issued capital of Paul. The investment was made when the retained earnings of Paul were \$100,000. The draft statements of financial position of the two entities at 31 December 20X0 showed the following balances:

	Peter	Paul
	\$'000	\$'000
Share capital (\$1 shares)	250	160
Retained earnings	200	180
_	450	340

On 31 December 20X0 Peter and Paul paid dividends of \$40,000 and \$20,000 respectively. Neither entity has made any entry in its financial statements in respect of either dividend.

# Requirement

Calculate the balance on the consolidated retained earnings of Peter after accounting for both dividends (ignore goodwill on consolidation)? (3 marks)

(c) BJS, a listed entity, had a weighted average of 27,000 shares in issue in its financial year ended 31 August 20X6. It was also financed throughout the year by an issue of

convertible loan stock with a par value of \$50,000. The loan stock is convertible at the option of the holders at the rate of 12 new ordinary shares for every \$100 of loan stock at par value. The finance cost recognised in BJS's income statement for the year ended 31 August 20X6 in respect of the loan stock was \$6,000. The tax rate applicable to BJS was 30% during the financial year. The profit attributable to ordinary shareholders for the year ended 31 August 20X6 was \$100,000.

#### Requirement

Calculate earnings per share, and diluted earnings per share for BJS for the year ended 31 August 20X6. (4 marks)

(Total marks = 10)

# Question 2

- (a) Abbott purchased 20 million of the 25 million issued \$1 ordinary shares in Costello on 31 December 20X4, when the reserves of Costello showed a balance of \$25 million and the net assets were \$50 million. The cost of the purchase was \$62 million. It is group policy to value non-controlling interest at acquisition at fair value. The fair value of the non-controlling interest of Costello was \$6.5 million at the acquisition date. For the purposes of the consolidation the following matters may be relevant:
- At 31 December 20X4 there was a contingency in existence that resulted in a gain of \$5 million to Costello on 31 March 20X5.
- At 31 December 20X4 the property, plant and equipment of Costello had a fair value that was \$10 million in excess of its carrying value in the financial statements of Costello.
- At 31 December 20X4 Costello sold a branded product. The directors of Abbott considered that this brand name was worth around \$7.5 million but the brand name has no readily ascertainable market value.

# Requirement

Explain how the investment in Costello should be accounted for in the consolidated financial statements of Abbott and calculate the goodwill on consolidation of Costello that will appear in the consolidated statement of financial position of Abbott at 31 December 20X4?

(6 marks)

(b) The statements of financial position of the two entities at 31 December 20X8 showed the following:

	Abbott	Costello
	\$'000	\$'000
Ordinary share capital	50,000	25,000
Retained earnings	60,000	35,000
	110,000	60,000

• The property, plant and equipment of Costello that was included in its statement of financial position at 31 December 20X4 (the date of acquisition) had an estimated future economic life of 10 at 31 December 20X4. None had been sold or scrapped by 31 December 20X8.

#### Requirement

Calculate the consolidated retained earnings balance of Abbott at 31 December 20X8?

(4 marks)

(Total marks = 10)



(a) Tea owns 75% of the ordinary share capital of Cup. Cup supplies goods to Tea at a profit margin of 20% on sales. In the year to 31 December 20W9 the total supplies of goods from Cup to Tea were \$6 million. At 31 December 20W9 the inventory of Tea included \$1,200,000 in respect of goods purchased from Cup.

#### Requirement

Explain what adjustment is required to consolidated revenue in respect of the intra-group sales during 20W9? (3 marks)

(b) The inventory of Tea at 31 December 20W8 included \$750,000 in respect of goods purchased from Cup under the same terms as described in (a) above.

#### Requirement

Explain what adjustment is required to the consolidated gross profit in respect of the intragroup sales for the year ended 31 December 20W9? (3 marks)

(c) At 31 December 20W9 the reserves of Tea and Cup were \$6 million and \$4 million respectively. Cup is the only subsidiary of Tea and it has been a subsidiary since incorporation.

# Requirement

Calculate the consolidated reserves of Tea at 31 December 20X9?

(4 marks)

(Total marks = 10)



The following summary statements of financial position relate to Frank, Frank's subsidiary Dean and Dean's subsidiary Sammy, at 31 December 20X0:

	Frank	Dean	Sammy
	\$'000	\$'000	\$'000
Investment in subsidiary	32,000	24,300	
Other net assets	40,000	30,000	45,000
	72,000	54,300	45,000
Ordinary shares of \$1	30,000	30,000	20,000
Retained earnings	42,000	24,300	25,000
-	72,000	54,300	45,000

- On 31 December 20W5 Frank purchased 20 million shares in Dean, when the retained earnings of Dean stood at \$22 million and the retained earnings of Sammy stood at \$12 million.
- On 31 December 20W4 Dean purchased 12 million shares in Sammy, when the retained earnings of Sammy stood at \$10.5 million.
- The group's policy is to value non-controlling interest at the acquisition date at the proportionate share of the fair value of the subsidiary's identifiable net assets.

## Requirement

Prepare the consolidated statement of financial position for the Frank group as at 31 December 20X0. (10 marks)

# ?

#### **Question 5**

- (a) Extracts from the consolidated financial statements of Spender show the following regarding non-controlling interests:
- Opening non-controlling interests in the statement of financial position were \$50 million.
- Closing non-controlling interests in the statement of financial position were \$80 million.
- The charge in the consolidated income statement in respect of non-controlling interests was \$25 million.
- During the year Spender acquired 80% of the ordinary shares of a new subsidiary, Jacked, that had net assets of \$100 million at the date of acquisition.
- There were no unpaid dividends to minority shareholders at the beginning or end of the year.
- The group's policy is to value non-controlling interest at the acquisition date at the proportionate share of the fair value of the subsidiary's identifiable net assets.

#### Requirement

Calculate the amount that will be shown in the consolidated cash flow statement as payments to the non-controlling interest in the year and explain where this figure would be included?

(4 marks)

- (b) The cost of the acquisition in Jacked, referred to in (a) was \$140 million and it was financed as follows:
  - a cash payment of \$20 million;
  - loan notes of \$50 million in Spender issued at par;
  - 20 million \$1 shares in Spender issued when the market value of the shares was \$3.50 per share;
  - the acquired subsidiary had net bank overdrafts of \$10 million at the date of acquisition.

# Requirement

Calculate the amount that will be shown as the acquisition cost of Jacked in the consolidated cash flow statement of Spender and explain where this figure would be included?

(3 marks)

(c) The opening balance on non-current assets of Spender totalled \$10 million. The closing balance was \$14 million. The depreciation charge for the period was \$2.6 million and the non-current assets of Jacked at the date of acquisition totalled \$3 million. There were no disposals or revaluations in the period.

#### Requirement

Calculate the amount that would be included as purchase of non-current assets in the consolidated cash flow statement of Spender and explain where this cash flow would be included.

(3 marks)

(Total marks = 10)

# ?

## **Question 6**

You are the management accountant of XYZ, a company with several subsidiaries.

The financial statements for the year ended 30 June 20X6 are currently being finalised and are due to be published and filed in January 20X7.

Your assistant has a good knowledge of basic accounting techniques but knows little of the provisions of accounting standards. Accordingly, it is the practice within your organisation for your assistant to prepare a first draft of the basic financial statements and a summary of transactions which require your attention, highlighting a recommendation of the appropriate accounting treatment for each transaction.

#### Requirements

Draft a reply to your assistant which evaluates the correctness, or otherwise, of the proposed treatment for *each* transaction and suggests any changes you consider appropriate.

If you consider the recommended treatment to be incorrect, your advice should include a statement of, *and* reasoning *for*, what you consider to be the correct treatment.

In each case, your answer should refer to relevant provisions of IFRS.

The transactions highlighted by your assistant are as follows:

- (a) XYZ has a subsidiary, GHI, in which it owns 80% of the issued ordinary share capital. On 1 June 20X6, GHI sold goods to XYZ having an invoiced price of \$50 million. These goods (which cost GHI \$40 million to manufacture) were included in the inventory of XYZ at 30 June 20X6. Your assistant proposes to eliminate unrealised profit of \$8 million from inventory and consolidated reserves, on the basis that the total unrealised profit of \$10 million was made by a subsidiary in which XYZ has an 80% interest. (5 marks)
- (b) For a number of years XYZ has been selling a product called 'Timid' which is a superior brand of washing powder. This product was developed by the company and has now become a household name and has captured a substantial share of the market. Your assistant has heard members of the board express the view that the value of the Timid brand name 'must be worth at least \$40 million' and proposes to bring an intangible asset of \$40 million into the financial statements by debiting intangible non-current assets and crediting reserves. (5 marks)

(Total marks = 10)



# **Question 7**

Textures manufactures artificial limbs. Its financial year end is 30 November 20X6. It manufactures in the United Kingdom and exports more than 60% of its output. It has several foreign subsidiary companies.

It has developed a number of arrangements to support its export sales. These include agreements with Pills, Eduaid, Bracos and Computer Control. Information on the agreements is as follows.

1. Agreement with Pills. An agreement was made in 20X2 with Pills, a pharmaceutical company, to jointly establish on a 50:50 basis Textures & Pills Joint Venture. Both Textures and Pills guarantee to meet liabilities if the other party fails to meet its share of the costs and risks.

Accounts prepared for Texture & Pills Joint Venture for the year ended 30 November 20X6 showed the following:

	\$'000
Non-current assets	
Premises	300
Current assets	
Bank and cash	30
	330
Capital	
As at 1 December 20X5	
Textures	211
Pills	211
	422
Less expenses	92
As at 30 November 20X6	330

2. Agreement with Eduaid and Bracos. Textures entered into an agreement on 1 December 20X1 with Eduaid, a company that manufactured educational equipment, and Bracos, a South American lawyer, to set up under their joint control an unincorporated undertaking in South America to trade as Eurohelp.

Textures had an effective 30% interest in Eurohelp. The statement of financial position of Textures as at 30 November 20X6 showed an investment at cost in Eurohelp of \$750,000.

The statement of financial position of Eurohelp for the year ended 30 November 20X6 showed:

Non-current assets Net current assets	\$'000 7,500 <u>1,100</u> <u>8,600</u>
Capital account	
As at 30 November 20X5	6,750
Retained profit for the year	1,850
As at 30 November 20X6	8,600

3. Agreement with Computer Control. Textures entered into an agreement on 1 December 20X3 with Computer Control to jointly control Afrohelp, a company in which each company held a 50% interest. Afrohelp assembled mechanical products from Textures and automated them with control equipment from Computer Control.

The joint venture has been equity accounted by each investor company. One of the newly appointed non-executive directors has questioned whether the investment in Afrohelp should be treated as a subsidiary.

On 1 November 20X6 Textures sold inventory costing \$110,000 to Afrohelp for \$162,000. This inventory was unsold at 30 November 20X6.

Textures adopts proportionate consolidation wherever permitted by IFRS.

# Requirements

Explain how the investments in Textures & Pills Joint Venture and Eurohelp would be included in the consolidated financial statements of Textures and prepare appropriate

extracts from the consolidated statement of financial position of the company as at 30 November 20X6. (10 marks)

*Note*: You should refer to the provisions of international accounting standards where relevant.



Fair values in acquisition accounting is dealt with in IFRS 3 Business Combinations.

#### Requirements

- (a) Explain why such an accounting standard was needed for fair values. (4 marks)
- (b) Describe the main provisions of IFRS 3 as they relate to fair value. (6 marks)

(Total marks = 10)

# Question 9

(a) On 1 January 20X1 J issues a zero-coupon bond for \$10,000,000. The bond is repayable on 31 December 20X5 at a sum of \$14,025,245. The bondholders receive no interest over the 5-year life of the bond.

#### Requirement

Explain, with reference to the appropriate international accounting guidance, how this financial instrument should be accounted for in the financial statements of J and calculate the amount of the finance charge that should be recognised by J in its financial statements for the year ending 31 December 20X2? (5 marks)

(b) J also issues 3,000 convertible bonds on 1 January 20X1 at par value of \$2,000 per bond. The bonds are redeemable on 31 December 20X3 at par. The bonds pay interest annually in arrears at 4%. Under the terms of the bonds, each can be converted on maturity to 105 \$1 shares.

The market rate of interest for a similar instrument with no conversion rights is 6%.

# Requirement

Explain, with reference to the appropriate international accounting guidance, how this financial instrument should be accounted for in the financial statements of J and show prepare the accounting entry that would record this issue. (5 marks)

(Total marks = 10)

# Question 10

(a) At 1 February 20X4, the beginning of its financial year, O has in issue 5,700,000 ordinary shares of \$1 each. On 30 September 20X4, the entity raises a further \$1,200,000 in capital by the issue of further ordinary shares at par.

Extract from O's consolidated income statement and statement of changes in equity at 31 January 20X5 shows the following:

\$
2,500,000
(750,000)
1,750,000
(200,000)
(690,000)

#### Requirement

Calculate O's EPS for the year ending 31 January 20X5.

(3 marks)

(b) Z has 3,000,000 shares in issue at 1 April 20X2. On 1 October 20X2 the entity makes a bonus issue of one share for every four held. On 1 October 20X3 Z makes a further bonus issue of one share for every three held.

Earnings attributable to ordinary shareholders for the year ending 31 March 20X3 were \$810,000, and for the year ending 31 March 20X4 were \$903,000.

#### Requirement

In the entity's financial statements for the year ending 31 March 20X4, what is the restated EPS comparative figure for 20X3. (3 marks)

(c) H has 3,000,000 shares in issue at 1 October 20X3. On 1 February 20X4 a rights issue of 1 for 6 is made at \$1.62 per share. The market price of one share immediately prior to the rights issue was \$1.90.

Earnings attributable to ordinary shareholders for the year ending 30 September 20X4 were \$1,585,000.

#### Requirement

Calculate the EPS to be reported in the financial statements for the year ending 30 September 20X4. (4 marks)

(Total marks = 10)

# Question 11

On 1 February 20X7 Jake sold a freehold interest in land to a financing institution for \$5 million. The contractual terms require that Jake will repurchase the freehold in 3 years time for \$8.82 million. Jake has the option to repurchase on 31 January 20X5 for \$6 million or on 31 January 20X6 for \$7.1 million. Prior to the disposal the land was recorded at its carrying value of \$4 million in Jake's accounting records. The receipt of \$5 million has been recorded with a credit to suspense account. No other accounting entries have been made in respect of this transaction.

At 31 January 20X5, Jake's directors decide not to take up the option to repurchase.

On 1 March 20X8 Jake issued 10 million \$1 non-redeemable preference shares with a dividend rate of 5% which is accumulated if unpaid in any accounting period. The related transaction costs of \$50,000 have been debited to share premium account. The proceeds of the issue have been credited to suspense as the accountant is unsure how to record the issue.

# Requirement

Briefly explain the substance of both transactions, and prepare journal entries to record them correctly in the accounting records of Jake for the year ended 31 January 20X5.

(10 marks)

# Question 12

Black has an available for sale investment with a carrying value of \$1,130,000 as at the year end date, 31 December 20X6. The value of the investment at 31 December 20X7 is \$1,150,000.

Black was concerned about the value of the shares falling and in order to mitigate this risk it entered into a derivative contract during 20X8 to hedge against the potential effect on the value of the shares of a general downturn in the market. The hedge is 100% effective and the contract has a positive value of \$250,000 as at 31 December 20X8. The fall in the value of the available for sale investment was \$270,000 as at 31 December 20X8, however \$20,000 of that related to a change in the credit rating of the entity invested in.

#### Requirement

Briefly describe the treatment of the investments noted above and prepare the required journal entries for the years ended 31 December 20X7 and 20X8. (10 marks)



#### **Question 13**

You are the management accountant of Small. On 1 October 20X3 Small issued 10 million \$1 preference shares at par, incurring issue costs of \$100,000. The dividend payable on the preference shares was a fixed 4% per annum, payable on 30 September each year in arrears. The preference shares were redeemed on 1 October 20X8 at a price of \$1.35 per share. The effective finance cost of the preference shares was 10%. The statement of financial position of the entity as at 30 September 20X8, the day before the redemption of the preference shares, was as follows:

Ordinary share capital (non-redeemable)	100.0
Redeemable preference shares	13.5
Share premium account	25.8
Retained earnings	59.7
-	199.0
Net assets	199.0

#### **Requirements**

- (a) Write a memorandum to your assistant which explains:
  - how the total finance cost of the preference shares should be allocated to the income statement over their period of issue;

Your memorandum should refer to the provisions of relevant accounting standards. (5 marks)

(b) Calculate the finance cost in respect of the preference shares for each of the 5 years ended 30 September 20X8. (5 marks)

(Total marks = 10)



# **Question 14**

CBA is a listed entity that runs a defined benefit pension scheme on behalf of its employees. In the financial year ended 30 September 20X6 the scheme suffered an actuarial loss of \$7.2 million. The entity's directors are aware that the relevant accounting standard, IAS 19 *Employee benefits*, was amended recently. They have asked you, the financial controller, to write a short briefing paper, setting out an outline of the options for accounting for the actuarial loss in accordance with the amended version of the standard.

# Requirement

Prepare the briefing paper explaining the options and identifying, as far as possible from the information given, the potential impact on the financial statements of CBA of the two alternative accounting treatments.

(10 marks)



# **Question 15**

The IASB requires that a reporting entity's financial statements should report the substance of the transactions into which it has entered.

You are the management accountant of S. During the most recent financial year (ended 31 August 20X8), the company has entered into a factoring arrangement with F. The main terms of the agreement are as follows:

- 1. On the first day of every month S transfers (by assignment) all its trade receivables to F, subject to credit approval by F for each receivable transferred by S.
- 2. At the time of transfer of the receivables to F, S receives a payment from F of 70% of the gross amount of the transferred receivables. The payment is debited by F to a factoring account which is maintained in the books of F.
- 3. Following transfer of the receivables, F collects payments and performs any necessary follow-up work.
- 4. After collection by F, the cash received is credited to the factoring account in the books
- 5. F handles all aspects of the collection of the receivables of S in return for a monthly charge of 1 % of the total value of the receivables transferred at the beginning of that month. The amount is debited to the factoring account in the books of F.
- 6. Any receivables not collected by F within 90 days of transfer are regarded as bad by F and are reassigned to S. The cash previously advanced by F in respect of bad receivables is recovered from S. The recovery is only possible out of the proceeds of other receivables which have been assigned to S. For example, if, in a particular month, S assigned trade receivables having a value of \$10,000 and a debt of \$500 was identified as bad, then the amounts advanced by F to S would be \$6,650 (i.e.,  $70\% \times $10,000 - 70\% \times $500$ ).
- 7. On a monthly basis, F debits the factoring account with an interest charge which is calculated on a daily basis on the balance on the factoring account.
- 8. At the end of every quarter, F pays over to S a sum representing any credit balance on its factoring account with S at that time.

# Requirements

Draft guidance to the board of directors of S, explaining how the factoring arrangement will be reported in the financial statements of S. (10 marks)



# **Question 16**

You are the chief accountant of Ant, an entity that prepares financial statements in accordance with International Accounting Standards. Your assistant has prepared the first draft of the consolidated financial statements for the year ended 31 October 20X3 and these show a profit after tax of \$66 million, while the statement of financial position shows ownership interests (total assets less total liabilities, including non-controlling interests) of \$450 million.

Your assistant has identified the following issues that require your review:

# Issue (a)

On 1 November 20X2, Ant established a new subsidiary located in a jurisdiction where the unit of currency is the Franco. The initial investment was 40 million Francos (the initial net assets of the subsidiary). The investment was financed by a loan of 40 million Francos from a German bank. No capital repayments of the loan are due until 31 October 20Z2.

The exchange rate at 1 November 20X2 was 1.6 Francos to \$1. On 31 October 20X3,

the exchange rate was 1.5 Francos to \$1. Due to large start-up costs, the subsidiary did

not make a profit in the early months of trading and the net assets of the subsidiary at 31 October 20X3 remained at 40 million Francos.

In preparing the draft consolidated financial statements, your assistant has translated both the loan and the financial statements of the subsidiary at 1.6 Francos to \$1 on the basis that the financing of the subsidiary was obtained when the exchange rate was 1.6 Francos to \$1.

# Issue (b)

On 1 November 20X2, Ant issued two million \$100 loan notes at \$90 per note. A merchant bank received \$4 million to underwrite the issue and Ant incurred other costs of \$500,000 relating to the issue of the notes. The notes pay no interest and are redeemable at \$135 per note on 31 October 20X7. As an alternative to redemption, the notes can be converted into 50 Equity shares per \$100 note on 31 October 20X7.

Your assistant has written off the issue costs of \$4.5 million to the income statement for the year ended 31 October 20X3 as an administrative expense and credited the proceeds of issue (\$180 million) to a convertible loan notes account. He proposes to show this in the capital and reserves section of the statement of financial position on the basis that the share price on 31 October 20X7 is likely to be at least \$4, so conversion, rather than repayment, is likely to be a near certainty.

Your assistant has been informed that, at 1 November 20X2, the fair value of the options to convert the loan notes into shares on 31 October 20X7 was \$22.5 million. However, he does not consider this information to be relevant and so has ignored it.

#### Requirement

For each of the issues, evaluate the treatment adopted by your assistant with reference to currently published Accounting Standards. Where you consider the treatment adopted to be incorrect, you should state the journal adjustment required to correct the error.

In all cases, you should give any supporting explanations you consider appropriate to justify your conclusions.

The allocation of marks to the issues is as follows:

# ?

# **Question 17**

You are the financial controller of Jade, a entity which has recently established a pension scheme for its employees. It chose a defined benefit scheme rather than a defined contribution scheme.

Jade makes payments into the pension scheme on a monthly basis.

Jade prepares its financial statements to 31 December each year.

On 31 December 20X7 the market value of the scheme's assets was \$40 million and the present value of the scheme's liability \$44 million. Actuarial losses not yet recognised in the income statement amounted to \$3 million. In 20X8 the following data is relevant:

- current service cost: \$4 million,
- unwinding of discount: \$3.6 million,
- expected return on pension plan assets: \$4.8 million,
- contributions for the year: \$3.4 million.

On 31 December 20X8 the market value of the scheme's assets was \$42 million and the present value of the scheme's liability \$25 million.

Jade's accounting policy is to defer actuarial gains and losses to future periods so far as is permissible under the requirements of IAS 19.

#### Requirement

Determine the total charge in the income statement for pensions (excluding amounts deducted from employees' gross salaries) and the amounts shown in the statement of financial position in respect of pensions.

Ignore deferred taxation.

(10 marks)



## **Question 18**

Make-it is a manufacturing entity. One of its subsidiaries, Do-it, operates in a country which experiences relatively high rates of inflation in its currency, the Do. Most entities operating in that country voluntarily present two versions of their financial statements: one at historical cost, and the other incorporating current cost adjustments. GFE complies with this accepted practice. Extracts from the income cp statement adjusted for current costs for the year ended 30 September 20X5 are as follows:

	Do	Do
	000	000
Historical cost operating profit		1,500
Current cost adjustments:		
Cost of sales adjustment	130	
Depreciation adjustment	86	
Loss on net monetary position	32	
	_	248
Current cost operating profit		1,252

# Requirements

(a) Explain the defects of historical cost accounting in times of increasing prices.

(4 marks)

(b) Explain how each of the three current cost adjustments in GFE's financial statements contributes to the maintenance of capital. (6 marks)



#### **Question 19**

You have been asked by a colleague to present a brief paper to accounting students at the local university about recent attempts at convergence between International Financial Reporting Standards (IFRS) and US Generally Accepted Accounting Practice (GAAP). The students are knowledgeable about IFRS but have not studied US GAAP in any detail.

# Requirement

Prepare the paper, describing the progress to date of the convergence project, including some examples of areas where convergence has taken place. (10 marks)



# Question 20

It is becoming increasingly common for listed entities to provide non-financial disclosures intended to inform stakeholders about the business's environmental policies, impacts and

practices. Supporters of such voluntary disclosures argue that stakeholders have a right to be informed about environmental issues in this way. However, there are also arguments against this type of disclosure.

#### Requirement

Identify and explain the principal arguments **against** voluntary disclosures by businesses of their environmental policies, impacts and practices.

## **Section B**

The following questions are those that reflect exam standard questions worth 25 marks. These typically cover the syllabus areas of Sections A and C. There may also be areas of Sections B and D covered but they will not account for the majority of the marks.



# **Question 21**

The statements of financial position of three entities, AD, BE and CF at 30 June 20X6, the year end of all three entities, are shown below:

	A	D	В	$^{2}E$	C	F
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
ASSETS						
Non-current assets:						
Property, plant and equipment	1,900		680		174	
Financial asset: investments						
in shares	880		104		_	
Other financial asset	_980					
		3,760		784		174
Current assets:						
Inventories	223		127		60	
Trade receivables	204		93		72	
Other current assets	25		_		_	
Cash	72		28		12	
		_524		248		144
		4,284		1,032		318
EQUITY AND LIABILITIES						
Equity:						
Share capital (\$1 shares)	1,000		300		100	
Retained earnings	<u>2,300</u>		557		<u>122</u>	
		3,300		857		222
Non-current liabilities		600		_		_
Current liabilities:						
Trade payables	247		113		84	
Income tax	137		_62_		_12	
		384		<u>175</u>		_96
		4,284		1,032		<u>318</u>

#### Notes

1. Investment by AD in BE

AD acquired 80% of the ordinary shares of BE on 1 July 20X3 for \$880,000 when BE's retained earnings were \$350,000. Goodwill on acquisition continues to be unimpaired.

#### 2. Investment by BE in CF

BE acquired 40% of the ordinary shares of CF on 1 January 20X6 for \$104,000. BE appoints one of CF's directors and since the acquisition has been able to exert significant influence over CF's activities. CF's retained earnings at the date of acquisition were \$102,000.

BE and CF are unquoted entities and their fair value cannot be reliably measured, as a result the investments held in the individual accounts of both AD and BE are classified as available for sale and are held at cost.

The group's policy is to value non-controlling interest at the acquisition date at the proportionate share of the fair value of the subsidiary's identifiable net assets.

#### 3. Other financial asset

AD's other financial asset is a debt instrument with a fixed interest rate of 5%. The instrument was issued on 1 July 20X4 for proceeds of \$1,000,000. The instrument is redeemable at a premium on 30 June 20X8; the applicable effective interest rate over the life of the instrument is 8%. The full annual interest amount was received and recorded by AD in June 20X5 and June 20X6, and the appropriate finance charge was recognised in the financial year ended 30 June 20X5. However, no finance charge has yet been calculated or recognised in respect of the financial year ended 30 June 20X6.

#### 4. Other current assets

Other current assets of \$25,000 in AD represent a holding of shares in a major listed company. AD maintains a portfolio of shares held for trading. At 30 June 20X6 the only holding in the portfolio was 4,000 shares in DG, a major listed company with 2.4 million ordinary shares in issue. The investment was recognised on its date of purchase, 13 May 20X6, at a cost of 625 cents per share. At 30 June 20X6, the fair value of the shares had risen to 670 cents per share.

#### 5. Intra-group trading

BE supplies goods to CF. On 30 June 20X6 CF held inventories at cost of \$10,000 that had been supplied to it by BE. BE's profit margin on the selling price of these goods is 30%. On 27 June 20X6 AD made a payment of \$5,000 to BE, which was not received and recorded by BE until after the year end. The receivables of BE at the year end include \$5,000 in respect of this intra-group balance.

#### Requirements

- (a) Explain the accounting treatment in the statement of financial position and income statement for the financial asset and other current asset required by IAS 39 *Financial Instruments: Recognition and Measurement.* (5 marks)
- (b) Prepare the consolidated statement of financial position for the AD Group at 30 June 20X6. (20 marks)

(Total marks = 25)



# **Question 22**

You are the accountant responsible for the Rag group consolidation. The income statements of Rag, Tag and Bobtail for the year ended 31 March 20X9 are given below.

	<i>Rag</i> \$'000	<i>Tag</i> \$'000	Bobtail \$'000
Revenue (note 1)	65,000	50,000	100,000
Cost of sales	(35,000)	(28,000)	(82,000)
Gross profit	30,000	22,000	18,000
Other operating expenses	(15,000)	(11,000)	(9,000)
Operating profit	15,000	11,000	9,000
Investment income (note 2)	3,000	1,200	_
Interest payable	(3,200)	(1,800)	(1,200)
Profit before taxation	14,800	10,400	7,800
Taxation	(3,600)	(2,800)	2,400)
Profit for the period	11,200	7,600	5,400

#### Notes to the income statements

- 1. Rag supplies a component which is used by both Tag and Bobtail. Because of the close relationships between the three entities, the component is supplied at a mark-up of only 10% on cost. Details of inter-entity sales of the product for the year to 31 March 20X9 were as follows:
  - Rag to Tag \$8 millionRag to Bobtail \$4 million

Details of the inventory of the component supplied by Rag which were included in the books of Tag and Bobtail at the beginning and end of the year were:

	20X9	20X8
	\$'000	\$'000
Tag	2,200	1,980
Bobtail	1.100	990

2. Rag holds 75% of the issued share capital of Tag. Tag holds 40% of the issued share capital of Bobtail.

Your assistant is responsible for preparing the draft consolidated financial statements for your review. She is aware that Tag will be dealt with as a 75% subsidiary but is unsure of the way of dealing with Bobtail.

The group's policy is to value non-controlling interest at the acquisition date at the proportionate share of the fair value of the subsidiary's identifiable net assets.

# Requirements

(a) Write a memorandum to your assistant which explains how Bobtail will be incorporated into the consolidated financial statements of Rag.

Your memorandum should refer to relevant accounting standards to support your explanations. (5 marks)

(b) Prepare a working schedule for the consolidated income statement of Rag for the year ended 31 March 20X9. You should start with the revenue and end with profit for the period. Do *not* prepare notes to the consolidated income statement.

(20 marks)

(Total marks = 25)



## **Question 23**

AX, a listed entity, is planning to acquire several smaller entities. In order to raise the cash for its programme of acquisitions, it has recently sold part of its stake in a subsidiary, CY, and has raised \$10 million in a bond issue.

Summarised statements of financial position for AX, CY and the other member of the group, EZ, at 31 October 20X7 are given below:

	AX	CY	EZ
	\$'000	\$'000	\$'000
ASSETS			
Non-current assets:			
Property, plant and equipment	20,000	8,900	5,000
Investment in subsidiaries (notes 1 & 2)	15,500	_	_
	35,500	8,900	5,000
Current assets	34,500	9,500	4,700
	70,000	18,400	9,700
EQUITY AND LIABILITIES	·		
Equity:			
Called up share capital (\$1 shares)	20,000	4,000	3,000
Retained earnings	18,000	7,000	3,000
	38,000	11,000	6,000
Non-current liabilities	_	2,400	1,000
Current liabilities	18,000	5,000	2,700
Suspense account (notes 1 & 3)	14,000	_	_
	70,000	18,400	9,700

#### Notes:

- 1. The investment in 80% of CY's ordinary share capital was purchased several years ago for \$8 million when CY's retained earnings were \$3.5 million. There has been no change since then in the amount of CY's share capital, and goodwill has remained unimpaired. No adjustments to fair value of CY's net assets were made either at acquisition or subsequently.
  - On 31 October 20X7 AX sold one quarter of its shareholding in CY to an unconnected party for \$4 million. The retained earnings of CY totalled \$6.5 million at the date of disposal. This amount has been debited to cash and credited to the suspense account. Ignore income tax implications.
- 2. The investment in 100% of EZ's ordinary share capital was purchased on 30 April 20X5 for \$7.5 million when EZ's retained earnings were \$1.5 million. Goodwill has remained unimpaired since the date of acquisition.
  - Upon acquisition a revaluation exercise was carried out. Plant and equipment in EZ with a book value of \$1 million was revalued to \$1.5 million. There were no other adjustments in respect of fair value. The revaluation is treated as a consolidation adjustment only: EZ continues to recognise non-current assets at depreciated historic cost. The remaining useful life of the plant and equipment at 30 April 20X5 was estimated to be five years, of which thirty months had elapsed by 31 October 20X7.
- 3. AX issued \$10 million of 5% convertible bonds on 31 October 20X7. The bonds were issued in units of \$1,000 and are repayable on 31 October 20Y0 However, each bond is convertible into 250 ordinary shares at any time until maturity at the option of the bondholder. The market rate for similar, non-convertible, bonds is 7%. It can be

assumed that there were no issue costs. The \$10 million raised by the issue was debited to cash and credited to the suspense account.

#### **Requirements**

- (a) Explain the appropriate accounting treatment to record the issue of convertible bonds, discussing the reasons for the approach that is adopted by International Financial Reporting Standards for this type of financial instrument.
- (b) Prepare the consolidated statement of financial position for the AX group at 31 October 20X7.

# Question 24

Extracts from the consolidated financial statements of Holmes for the year ended 30 September 20X9 are given below.

1. Consolidated income statement for the year ended 30 September 20X9

	20X9	20X8
	\$'m	\$'m
Revenue	600	500
Cost of sales	(300)	(240)
Gross profit	300	260
Other operating expenses (N1)	(150)	(130)
Other income (N2)	10	_
Finance cost	(50)	(45)
Share of profit of associates	<u>17</u>	<u>17</u>
Profit before tax	$1\overline{27}$	102
Income tax expense	(35)	(25)
Profit for the period	92	77
Attributable to:		
Equity holders of parent	82	71
Non-controlling interest	10	6
	92	<u>6</u> 77

2. Summarised consolidated statement of changes in equity – year ended 30 September (amounts attributable to equity holders of parent)

	20X9	20X8
	\$'000	\$'000
Balance at the start of the year	242	196
Profit for the year	82	71
Dividends	(25)	(25)
	299	242

#### 3. Consolidated statement of financial position as at 30 September

	<i>20X9</i> \$'m	\$'m	<i>20X8</i> \$'m	\$'m
Non-current assets	ΨΠ	Ψ 111	ΨΠ	ΨΠ
Intangible assets (N3)		35		19
Property, plant and equipment (N4)		240		280
Investments in associates		80		<u>70</u>
THE COLLECTION OF AUGUSTACES		$3\frac{3}{55}$		$3\overline{69}$
Current assets		0,,,		00,
Inventories	105		90	
Receivables	120		100	
Investments	20		70	
Cash in hand	10		<u>5</u>	
		255	_	<u> 265</u>
		$\frac{255}{610}$		634
Share capital		100		100
Revaluation reserve		_		20
Retained earnings		199		122
		299		$\overline{242}$
Non-controlling interests		65		40
Non-current liabilities				
Obligations under finance leases	80		70	
Loans	_		90	
Deferred tax	<u>30</u>		<u>24</u>	
		110		184
Current liabilities				
Trade payables (N5)	71		60	
Tax	10		8	
Obligations under finance leases	25		20	
Bank overdraft	<u>30</u>		80	
		<u>136</u>		<u>168</u>
		<u>610</u>		<u>634</u>

#### Notes

#### 1. Other operating expenses

	20X9	20X8
	\$'m	\$'m
Distribution costs	81	75
Administrative expenses	75	70
Investment income	(6)	(15)
	150	130

From time to time the group invests cash surpluses in highly liquid investments that are shown as current assets in the consolidated statement of financial position.

#### 2. Other income

This represents the gain on sale of a large freehold property that was sold by Holmes during the year on 1 October 20X8 and leased back on an operating lease in line with the practice adopted by the rest of the group. The property was not depreciated in the current year. The property had been revalued in 20X0 and the revaluation surplus credited to a revaluation reserve. No other entries had been made in the revaluation reserve prior to the sale of the property.

# 3. Intangible non-current assets

This comprises the unimpaired balance of goodwill on consolidation. During the year ended 30 September 20X9 Holmes purchased 80% of the issued equity share capital of

Watson plc for \$100 million payable in cash. The net assets of Watson plc at the date of acquisition were assessed as having fair values as follows:

	\$'m
Plant and machinery – owned	50
Fixtures and fittings – owned	10
Inventories	30
Receivables	25
Cash at bank and in hand	10
Trade payables	(15)
Tax	_(5)
	105

#### 4. Property, plant and equipment

	30.9.X9	<i>30.9.X8</i>
	\$'m	\$'m
Freehold land and buildings	_	90
Plant and machinery – owned	130	100
Plant and machinery – leased	90	70
Fixtures and fittings – owned	20	20
-	$2\overline{40}$	$\frac{20}{280}$

During the year the group entered into new finance lease agreements in respect of certain items of plant and machinery. The amounts debited to property, plant and equipment in respect of such agreements during the year totalled \$40 million. No disposals of property, plant and equipment (owned or leased) took place during the year. Depreciation of property, plant and equipment for the year totalled \$58 million.

5. Trade payables

Trade payables at 30.9.X9 and 30.9.X8 do not include any accrued interest.

# Requirements

You are the management accountant of Holmes and you are in the process of preparing the consolidated cash flow statement. Your managing director is aware that the statement is required by IAS 7 *Cash Flow Statements*. She has a reasonable understanding of the rationale behind the cash flow statement but is not clear why it adds to the usefulness of financial statements since it is prepared from the income statement and the statement of financial position.

(a) Prepare the statement of cash flows for the Holmes group for the year ended 30 September 20X9 in the form required by IAS 7 *Cash Flow Statements*. Notes to the cash flow statement are *not* required but your workings must be clearly shown.

(20 marks)

(b) Write a brief memorandum to your managing director which explains the value that the cash flow statement adds to financial reports. (5 marks)

(Total marks = 25)



# **Question 25**

AT holds investments in three other entities. The draft income statements for the four entities for the year ended 31 March 20X7 are as follows:

	AT	BU	CV	DW
	\$'000	\$'000	\$'000	\$'000
Revenue	2,450	1,200	675	840
Cost of sales	(1,862)	(870)	(432)	(580)
Gross profit	588	330	243	260
Distribution costs	(94)	(22)	(77)	(18)
Administrative expenses	(280)	(165)	(120)	(126)
Interest received	_	2	_	_
Finance costs	(26)			
Profit before tax	188	145	46	116
Income tax	(40)	(50)	(12)	(37)
Profit for the period	148	95	34	79_

#### Notes

#### 1. Investments in BU, CV and DW

Several years ago AT purchased 75% of the ordinary shares of BU. On 30 September 20X6 it purchased a further 5% of BU's ordinary shares. In 20X3 AT, together with two other investor entities, set up CV. Each of the three investors owns one-third of the ordinary shares in CV. All managerial decisions relating to CV are made jointly by the three investor entities. On 1 January 20X7, AT purchased 35% of the ordinary shares in DW. AT exerts significant influence over the management of DW, but does not control the entity.

The group's policy is to value non-controlling interest at the acquisition date at the proportionate share of the fair value of the subsidiary's identifiable net assets.

#### 2. Intra-group trading

BU supplies inventories to AT, earning a gross profit margin of 20% on such sales. During the financial year ended 31 March 20X7, BU supplied a total of \$80,000 at selling price to AT. Of these items, 25% remained in AT's inventories at the year end. AT supplies a range of administrative services to BU, at cost. \$12,000 is included in BU's administrative expenses, and in AT's revenue, in respect of such services supplied during the year ended 31 March 20X7.

- 3. The group has a policy of adopting proportional consolidation wherever permitted by International Financial Reporting Standards.
- 4. Revenue and profits accrue evenly throughout the year, unless otherwise stated.
- 5. Finance costs

The finance costs in AT's income statement are in respect of short-term bank borrowings only. Finance costs in respect of its long-term borrowings have not yet been included, and an appropriate adjustment must be made. On 1 April 20X4, AT issued bonds at par in the amount of \$1,000,000. Issue costs were \$50,000. The bonds carry a coupon rate of interest of 5% each year, payable on the last day of the financial year. The interest actually paid on 31 March 20X7 has been debited to a suspense account, which is included under current assets in AT's draft statement of financial position.

The bonds will be repaid on 31 March 20X9 at a premium of \$162,000. The effective interest rate associated with the bonds is 9%, and the liability is measured, in accordance with IAS 39 *Financial Instruments: Recognition and Measurement*, at amortised cost.

#### 6. Financial asset

From time to time BU uses available cash surpluses to make short term investments in financial assets. Such assets are 'held-for-trading' and are invariably sold within a few months. At 31 March 20X7, BU held 4,000 shares in a listed entity, EX. The shares had been purchased on 20 January 20X7 at a price of 1332¢ per share. At 31 March 20X7, the market price per share was 1227¢. No adjustment has been made to the draft income statement above in respect of this financial asset.

#### Requirements

Prepare the consolidated income statement for the AT group for the financial year ended 31 March 20X7. Show full workings. (25 marks)

Note: 8 marks are available for the adjustments in respect of notes 5 and 6.

Work to nearest \$100. For the purposes of this question it is not necessary to make any adjustments to income tax.

# ?

# **Question 26**

You advise a private investor who holds a portfolio of investments in smaller listed companies. Recently, she has received the annual report of the BZJ Group for the financial year ended 31 December 20X5. In accordance with her usual practice the investor has read the chairman's statement, but has not looked in detail at the figures. Relevant extracts from the chairman's statement are as follows:

'Following the replacement of many of the directors, which took place in early March 20X5, your new board has worked to expand the group's manufacturing facilities and to replace non-current assets that have reached the end of their useful lives. A new line of storage solutions was designed during the second quarter and was put into production at the beginning of September. Sales efforts have been concentrated on increasing our market share in respect of storage products, and in leading the expansion into Middle Eastern markets.

The growth in the business has been financed by a combination of loan capital and the issue of additional shares. The issue of 300,000 new \$1 shares was fully taken up on 1 November 20X5, reflecting, we believe, market confidence in the group's new management. Dividends have been reduced in 20X5 in order to increase profit retention to fund the further growth planned for 20X6. The directors believe that the implementation of their medium-to long-term strategies will result in increased returns to investors within the next 2 to 3 years.'

The group's principal activity is the manufacture and sale of domestic and office furniture. Approximately 40% of the product range is bought in from manufacturers in other countries.

Extracts from the annual report of the BZJ Group are as follows:

#### BZJ Group: Income statement for the year ended 31 December 20X5

	20X5	20X4
	\$'000	\$'000
Revenue	120,366	121,351
Cost of sales	(103,024)	(102,286)
Gross profit	17,342	19,065
Operating expenses	(11,965)	(12,448)
Profit from operations	5,377	6,617
Interest payable	(1,469)	(906)
Profit before tax	3,908	5,711
Income tax expense	(1,125)	(1,594)
Profit for the period	2,783	4,117
Attributable to:		
Equity holders of the parent	2,460	3,676
Non-controlling interest	323	441
•	2,783	4,117

#### BZJ Group: Summarised statement of changes in equity for the year ended 31 December 20X5

	Retained earnings	Share capital	Share premium	Revaluation reserve	Total 20X5	Total 20X4
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
Opening balance	18,823	2,800	3,000	φ 000	24,623	21,311
1 0	10,023	2,800	3,000	2.000	-	21,311
Surplus on revaluation of properties				2,000	2,000	
Profit for the period	2,460				2,460	3,676
Issue of share capital		300	1,200		1,500	_
Dividends paid						
31 December	(155)				(155)	(364)
Closing balance	21,128	3,100	4,200	2,000	30,428	24,623

#### BZJ Group: Statement of financial position as at 31 December 20X5

	202	20X5		X4
	\$'000	\$'000	\$'000	\$'000
Non-current assets:				
Property, plant and equipment	40,643		21,322	
Goodwill	1,928		1,928	
Trademarks and patents	_1,004		1,070	
		43,575		24,320
Current assets:				
Inventories	37,108		27,260	
Trade receivables	14,922		17,521	
Cash			170	
		52,030		44,951
		95,605		69,271
Equity:				
Share capital (\$1 shares)	3,100		2,800	
Share premium	4,200		3,000	
Revaluation reserve	2,000		_	
Retained earnings	21,128		18,823	
		30,428		24,623
Non-controlling interest		2,270		1,947

Non-current liabilities:				
Interest bearing borrowings		26,700		16,700
Current liabilities:				
Trade and other payables	31,420		24,407	
Income tax	1,125		1,594	
Short-term borrowings	3,662		_	
		36,207		26,001
		95,605		69,271

#### Requirements

- (a) Calculate the earnings per share figure for the BZJ Group for the years ended 31 December 20X5 and 20X4, assuming that there was no change in the number of ordinary shares in issue during 20X4. (3 marks)
- (b) Produce a report for the investor that:
  - (i) analyses a nd interprets the financial statements of the BZJ Group, commenting upon the group's performance and position; (17 marks)
  - (ii) discusses the extent to which the chairman's comments about the potential for improved future performance are supported by the financial statement information for the year ended 31 December 20X5. (5 marks)

(Total marks = 25)

# Question 27

Spreader is a UK parent company with a number of wholly owned subsidiaries in Asia and Europe. Extracts from the consolidated financial statements of the group for the year ended 30 April 20X7 are given below.

#### Income statement - year ended 30 April

	20X7	20X6
	\$'000	\$'000
Revenue (note 1)	50,000	48,000
Cost of sales	(25,000)	(22,000)
Gross profit	25,000	26,000
Other operating expenditure	(15,000)	(14,200)
Operating profit	10,000	11,800
Interest payable	_(1,000)	(900)
Profit before taxation (note 2)	9,000	10,900
Taxation	(2,800)	(3,600)
Profit for the period	6,200	7,300

#### Notes

1. Analysis of turnover for the year by geographical segment

	Spreader		Asia		Europe		Total	
	20X7	20X6	20X7	20X6	20X7	20X6	20X7	20X6
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
Total revenue	15,000	20,000	10,000	8,000	30,000	25,000	55,000	53,000
Inter-segment revenue	(2,000)	(2,500)	(1,000)	(500)	(2,000)	(2,000)	(5,000)	(5,000)
Revenue from third								
parties	13,000	17,500	9,000	7,500	28,000	23,000	50,000	48,000

#### 2. Analysis of profit before tax for the year by geographical segments

	Spreader		Asia		Europe		Total	
	20X7	20X6	20X7	20X6	20X7	20X6	20X7	20X6
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
Segment profit	3,000	6,000	1,500	1,200	6,000	5,000	10,500	12,200
Common costs							(500)	(400)
Operating profit							10,000	11,800
Interest payable							(1,000)	(900)
Profit before taxation							9,000	10,900

#### 3. Analysis of net assets at end of year by geographical segment

	Spreader		As	Asia		Europe		Total	
	20X7	20X6	20X7	20X6	20X7	20X6	20X7	20X6	
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	
Segment net assets	15,000	13,500	6,000	5,000	20,000	20,000	41,000	38,500	
Unallocated assets							2,000	1,800	
Total net assets							43,000	40,300	

#### 4. Dividends

Amounts paid were: 20X7 \$3 million; 20X6 \$3.2 million.

#### Requirements

In your capacity as chief accountant of Spreader:

- (a) prepare a report for the board of directors of the company which analyses the results of the group for the year ended 30 April 20X7; (21 marks)
- (b) explain why the segmental data which has been included in the extracts may need to be interpreted with caution. (4 marks)

(Total marks = 25)



# **Question 28**

You are the accounting adviser to a committee of bank lending officers. Each loan application is subject to an initial vetting procedure, which involves the examination of the application, recent financial statements, and a set of key financial ratios.

The key ratios are as follows:

- Gearing (calculated as debt/debt + equity, where debt includes both long- and short-term borrowings);
- Current ratio;
- Quick ratio;
- Profit margin (using profit before tax).

Existing levels of gearing are especially significant to the decision, and the committee usually rejects any application from an entity with gearing of over 45%.

The committee will shortly meet to conduct the initial vetting of a commercial loan application made by TYD, an unlisted entity. As permitted by national accounting law in its country of registration, TYD does not comply in all respects with International Financial Reporting Standards. The committee has asked you to interview TYD's finance director to determine areas of non-compliance. As a result of the interview, you have identified two significant areas for examination in respect of TYD's financial statements for the year ended 30 September 20X6.

- 1. Revenue for the period includes a sale of inventories at cost to HPS, a banking institution, for \$85,000, which took place on 30 September 20X6. HPS has an option under the contract of sale to require TYD to repurchase the inventories on 30 September 20X8, for \$95,000. TYD has derecognised the inventories at their cost of \$85,000, with a charge to cost of sales of this amount. The inventories concerned in this transaction, are, however, stored on TYD's premises, and TYD bears the cost of insuring them.
- 2. Some categories of TYD's inventories are sold on a sale or return basis. The entity's accounting policy in this respect is to recognise the sale at the point of despatch of goods. The standard margin on sales of this type is 20%. During the year ended 30 September 20X6, \$100,000 (in sales value) has been despatched in this way. The finance director estimates that approximately 60% of this value represents sales that have been accepted by customers; the remainder is potentially subject to return.

The financial statements of TYD for the year ended 30 September 20X6 are as presented below. (Note: at this stage of the analysis only one year's figures are considered).

TYD: Income statement for the year ended 30 September 20X6

	\$'000
Revenue	600
Cost of sales	450
Gross profit	150
Expenses	63
Finance costs	17
Profit before tax	70
Income tax expense	25
Profit for the period	45

TYD: Statement of changes in equity for the year ended 30 September 20X6

	Share capital \$'000	Retained earnings \$'000	<i>Total</i> \$'000
Balances at 1 October 20X5	100	200	300
Profit for the period	45	45	45
Balances at 30 September 20X6	100	245	345

TYD: Statement of financial position at 30 September 20X6

	\$'000	\$'000
ASSETS		
Non-current assets:		
Property, plant and equipment		527
Current assets:		
Inventories	95	
Trade receivables	72	
Cash	_6	
		<u>173</u>
		<u>700</u>
EQUITY AND LIABILITIES		
Equity:		
Called up share capital	100	
Retained earnings	<u>245</u>	
		345

Non-current liabilities: Long-term borrowings		180
Current liabilities: Trade and other payables Bank overdraft	95 80	175
		700

#### Requirements

Prepare a report to the committee of lending officers that

- (i) discusses the accounting treatment of the two significant areas identified in the interview with the FD, with reference to the requirements of International Financial Reporting Standards (IFRS) and to fundamental accounting principles; (8 marks)
- (ii) calculates any adjustments to the financial statements that are required in order to bring them into compliance with IFRS (ignore tax); (5 marks)
- (iii) analyses and interprets the financial statements, calculating the key ratios before and after adjustments, and making a recommendation to the lending committee on whether or not to grant TYD's application for a commercial loan. (12 marks)

(Total marks = 25)

# Question 29

The directors of DPC, a listed entity, have been approached by three out of the five share-holders of PPS, an unlisted competitor. The PPS shareholders are nearing retirement age, and would like to realise their investment in the business. The two remaining shareholders do not object, but would like to retain between them at least a significant influence over the business.

The directors of DPC are currently concerned about the threat of a takeover bid for DPC itself. Although they would like to acquire an interest in PPS as it would help them to increase DPC's market share, they do not want to take any action that would adversely affect their financial statements and certain key accounting ratios (EPS, gearing [calculated as debt/equity], and non-current asset turnover).

There are two possibilities for consideration:

- 1. DPC could purchase 40% of the ordinary shares of PPS, giving it significant influence, but not control. The cost of this would be \$3.5 million, to be settled in cash. DPC would pay \$1 million out of its cash resources and would increase its existing long-term borrowings for the balance.
- 2. DPC could purchase 60% of the ordinary shares of PPS, giving it control. The cost of this would be \$6 million, to be settled in cash. DPC would pay \$3 million out of its cash resources, and would increase its existing long-term borrowings for the balances.

The purchase would take place on the first day of the new financial year, 1 January 20X8. Projected summary income statements for the 20X8 financial year, and projected summary statement of financial position at 31 December 20X8 are shown below. The DPC figures are consolidated to include its existing 100% held subsidiaries (it currently holds no interests in associates). The projected financial statements for PPS are for that entity alone.

#### Summary projected income statements for the year ended 31 December 20X8

	DPC consolidated	PPS entity
	Projected: 20X8	Projected: 20X8
	\$'000	\$'000
Revenue	60,300	10,200
All expenses including income tax	(55,300)	(9,500)
Profit for the period attributable to equity holders	5,000	700

#### Summary projected statements of financial position at 31 December 20X8

	DPC consolidated	PPS entity	
	Projected: 20X8	Projected: 20X8	
	\$'000	\$'000	Notes
Non-current assets	50,400	9,800	2
Current assets	82,000	16,000	
	132,400	25,800	
Equity	31,400	4,000	3 & 4
Long-term liabilities	10,000	9,300	
Current liabilities	91,000	12,500	
	132,400	25,800	

#### Notes:

- 1. DPC's consolidated projected financial statements at 31 December 20X8 do not take into account the proposed acquisition of PPS.
- 2. DPC's non-current asset figure includes goodwill on acquisition of various subsidiaries.
- 3. PPS's equity comprises 100,000 ordinary shares of \$1 each, \$3,200,000 of retained earnings brought forward on 1 January 20X8 and \$700,000 profit for the period.
- 4. DPC will have 10 million ordinary shares of \$1 each on 1 January 20X8. No issues of shares will be made during 20X8.

#### Requirements

- (a) Prepare draft projected financial statements for the DPC group for the year ending 31 December 20X8 under each of the following assumptions.
  - (i) DPC acquires 40% of the ordinary shares of PPS on 1 January 20X8;
  - (ii) DPC acquires 60% of the ordinary shares of PPS on 1 January 20X8.

It can be assumed that no impairment of either investment would have taken place by 31 December 20X8. (14 marks)

- (b) Calculate EPS, gearing and non-current asset turnover ratios based on the draft projected 31 December 20X8 financial statements for:
  - (i) DPC and its existing subsidiaries;
  - (ii) DPC including the acquisition of an associate interest in PPS;
  - (iii) DPC including the acquisition of a subsidiary interest in PPS. (6 marks)
- (c) Discuss the differences in the accounting ratios under the different scenarios, identifying reasons for the most significant differences. (5 marks)

(Total marks = 25)



## **Question 30**

You are the assistant to the Chief Financial Officer (CFO) of ABC, a light engineering business based in Bolandia. ABC, a listed entity, has expanded over the last few years with the successful introduction of innovative new products. In order to further expand its product range and to increase market share, it has taken over several small, unlisted, entities within its own country.

ABC's directors have recently decided to expand their markets by taking over entities based in neighbouring countries. As the first step in the appraisal of available investment opportunities the CFO has asked you to prepare a brief report on the position and performance of three possible takeover targets: entity W based in Winlandia, entity Y based in Yolandia and entity Z based in Zeelandia. These three countries share a common currency with Bolandia, and all three target entities identify their principal activity as being the provision of light engineering products and services. The report is to comprise a one page summary of key data and a brief written report providing an initial assessment of the targets. The format of the summary is to be based upon the one generally used by ABC for its first-stage assessment of takeover targets, but with the addition of:

- (i) price/earnings ratio information (because all three target entities are listed in their own countries), and
- (ii) so me relevant country-specific information.

You have produced the one-page summary of key data, given below, together with comparative information for ABC itself, based on its financial statements for the year ended 31 March 20X6.

	ABC	W	Y	Z
Country of operation	Bolandia	Winlandia	Yolandia	Zeelandia
Date of most recent annual report	31 March	31 January	30 June	30 June
	20X6	20X6	20X5	20X5
Financial statements			Yolandian	
prepared in compliance with:	IFRS	IFRS	GAAP	IFRS
Revenue	\$263.4m	\$28.2m	\$24.7m	\$26.3m
Gross profit margin	19.7%	16.8%	17.3%	21.4%
Operating profit margin	9.2%	6.3%	4.7%	8.3%
Return on total capital employed	11.3%	7.1%	6.6%	12.3%
Equity	\$197.8m	\$13.6m	\$14.7m	\$16.7m
Long-term borrowings	\$10.4m	\$6.2m	\$1.3m	\$0.6m
Average interest rate				
applicable to long-term				
borrowings by listed				
entities	7.5%	6%	8%	10%
Income tax rate	30%	28%	31%	38%
Inventories turnover	47 days	68 days	52 days	60 days
Receivables turnover	44 days	42 days	46 days	47 days
Payables turnover	46 days	50 days	59 days	73 days
Current ratio	1.4:1	0.7:1	1.1:1	0.9:1
P/E ratio	18.6	12.6	18.3	15.2

ABC has a cash surplus and would seek to purchase outright between 90% and 100% of the share capital of one of the three entities. The entity's directors do not intend to increase the gearing of the group above its existing level. Upon acquisition they would, as far as possible, retain the entity's management and its existing product range. However, they would also seek to extend market share by introducing ABC's own products.

#### Requirements

Prepare a report to accompany the summary of key data. The report should:

- (a) Analyse the key data, comparing and contrasting the potential takeover targets with each other and with ABC itself. (13 marks)
- (b) Discuss the extent to which the entities can be validly compared with each other, identifying the limitations of inter-firm and international comparisons. (12 marks)

  (Total marks = 25)

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# Solutions to Revision Questions

## **Section A**



# Solution 1

(a) Consolidated current assets are \$400,000 + \$350,000 - \$40,000 + \$15,000 (cash in transit) = \$725,000.

Consolidated current liabilities are \$250,000 + \$100,000 - \$25,000 = \$325,000.

(b) The consolidated reserves are as follows:

	\$'000
Retained earnings of Peter as given	200
Own dividend paid	(40)
Dividend received from Paul	15
Share of post-acquisition retained earnings of Paul	_45
[75% (\$180,000 - \$20,000 - \$100,000)]	220

(c)

1.	Adjust earnings:	\$	\$
	Earnings as stated		100,000
	Interest saving:		
	Finance cost	6,000	
	Tax effect $(6,000 \times 30\%)$	(1,800)	
			4,200
	Diluted earnings		104,200
2.	Diluted ordinary shares		
	\$50,000/100 × 12		6,000
	Number of ordinary shares in issue		27,000
	•		33,000

Basic eps 5 10Diluted eps = 104,200/33,000 = 315.8¢ per share Diluted eps = 104,200/33,000 = 315.8¢ per share



# Solution 2

(a) The investment in Costello will be accounted for as a subsidiary under IAS27 and as such will be fully consolidated. The consideration paid will be compared to the fair value of the net assets acquired and the difference recognised as goodwill on acquisition.

The goodwill on consolidation is \$62 m - 80% (\$50 m + \$5 m + \$10 m) = \$10million plus goodwill on non-controlling interest of  $1.3 \,\mathrm{m}$  ( $6.2 \,\mathrm{m} - 20\%$  NA of  $52 \,\mathrm{m}$ ). The total \$11.3 of goodwill will be included in non-current assets in the consolidated statement of financial position.

The brand name is included within the goodwill figure rather than dealt with as a separate asset because it has no readily ascertainable market value.

(b) We can show the corrected post-acquisition reserves of Costello in the following table:

	Year end date \$'000	Acquisition date \$'000	Post-acquisition \$'000
Share capital	25,000	25,000	
Retained earnings:			
Per accounts of Costello	35,000	25,000	
Contingent gain adjustment	_	5,000	
Property, plant and equipment adjustment	6,000	10,000	
Brand valuation adjustment	_	_	
	66,000	65,000	1,000

So the consolidated reserves are:

	\$'000
Abbott	60,000
Costello (80% $\times$ \$1,000,000)	800
	60,800



# Solution 3

(a) Intra-group sales are eliminated in full from consolidated turnover and cost of sales. Recorded as:

Dr Revenue \$6m Cr Cost of sales \$6m Being elimination of intra-group sales

(b) The adjustment to gross profit is the *movement in* the provision for unrealised profit between the beginning and end of the year. This is 20% (\$1,200,000 - \$750,000) = \$90,000. This will be charged to cost of sales and will therefore reduce gross profit by \$90,000, recorded as:

Dr Cost of sales/GP \$90,000 Cr Inventories \$90,000

Being elimination of unrealised profit on inventories.

(c) The consolidated reserves of the Tea group are:

	\$'000
Reserves of Tea	6,000
75% of reserves of Cup	3,000
75% of provision for unrealised profit	(180)
$(\$1,200,000 \times 20\% \times 75\%)$	8,820



# **Solution 4**

The effective interest of Frank in Sammy is 40% ( $2/3 \times 60\%$ ). The effective date of acquisition is 31 December 20W5, when the accumulated profits of Sammy stood at \$12 million.

The summary statement of financial position for the group as at 31 December 20X0 would be as follows:

ASSETS Goodwill on acquisition (W1) Net assets (\$40,000 + \$30,000 + \$32,000)	\$000 733 <u>115,000</u> 115,733
EQUITY AND LIABILITIES	
Ordinary share capital	30,000
Retained earnings (W2)	48,733
	78,733
Non-controlling interest (W3)	37,000
	115,733

### (W1) – Goodwill on acquisition

	\$000	\$000
Consideration transferred		32,000
Less net assets acquired:		
<b>Dean</b> – share capital	30,000	
Retained earnings at 20W5	22,000	
Less cost of investment in	(24,300)	
Sammy		
	27,700	
Group share 2/3		(18,467)
Sammy – share capital	20,000	
Retained earnings at 20W5	12,000	
	32,000	
Effective group share 40%		(12,800)
Goodwill on acquisition		733

### (W2) - Retained earnings

	Frank \$000	Dean \$000	Sammy \$000
Per SOFP 20X0	42,000	24,300	25,000
At acquisition	_	(22,000)	(12,000)
		2,300	
Group share of Dean	1,533		13,000
Effective share of Sam	5,200		
Consolidated	48,733		

### (W3) – Non-controlling interest

NCI in Dean $1/3 \times (\$54,300 - \cos t \text{ of investment in Sammy } \$24,300)$	= \$10,000
NCI in Sammy (based on effective holdings) 60% × \$45,000	= \$27,000
Total	\$37,000



# Solution 5

# (a) The dividends paid to non-controlling interest is:

	\$m
Opening balance	50
Profit for the year	25
Increase due to acquisition ( $$100m \times 20\%$ )	20
Dividend paid (balancing figure)	(15)
Closing balance	80

The dividend paid to non-controlling interest will be included as an outflow under the heading 'cash flows from financing activities'. It will be shown separately from dividends paid to equity shareholders.

- (b) The cash outflow is the *cash* paid (\$20 million) *plus* the net bank overdrafts acquired (\$10 million). Total: \$30 million. This will be included as an outflow under the heading 'cash flows from investing activities'.
- (c) The purchase of non-current assets is as follows:

	\$m
Opening balance	10
Non-current of sub acquired	3
	$1\bar{3}$
depreciation	(2.6)
_	10.4
Closing balance	14
Balancing fig is purchase of NCA	3.6



# Solution 6

#### Memorandum

To: Assistant accountant From: Management accountant

Date: 9 January 20X7

Accounting year ended 30 June 20X6 – adjustments to draft financial statements The following are my views on how to correctly treat each of the transactions below.

# (a) Elimination of unrealised profits (IAS 27)

Under IAS 27, all unrealised profits on inventory transferred between group companies at a market price must be eliminated as these can be realised only on their subsequent disposal to a third party. However, the IAS insists that the full amount of unrealised profit be eliminated from inventories with the minority shareholders being charged with their share.

The double entry would be recorded as follows:

Debit	Non-controlling interests	\$2 m
	Retained earnings	\$8 m
Credit	Inventory	\$10 m

## (b) Intangible assets (IAS 38)

A number of entities in the past have recorded brands on their statements of financial position but mostly when they have been acquired from other companies as a result of an acquisition.

IAS 38 states that internally generated goodwill, brands and other similar items should not be recognised as assets.



# Solution 7

- (a) The accounting treatment of joint ventures is set out in IAS 31 Interests in Joint Ventures. The treatment in the consolidated accounts depends on whether the form of the joint venture is that the venture comprises:
  - jointly controlled operations
  - jointly controlled assets
  - jointly controlled entities.

The agreement with Pills appears to establish jointly controlled assets. The venture has no separate business of its own but both Textures and Pills have, on a 50:50 basis, contributed assets to it. Under these conditions each venturer will, in its individual financial statements, recognise its share of the assets and liabilities of the joint venture. These amounts will be classified according to the nature of the assets and liabilities. Since all assets are jointly controlled, \$150,000 will be included in non-current assets and \$15,000 in current assets. The treatment in the consolidated financial statements will be identical.

The agreement with Eduaid and Bracos establishes a jointly controlled entity. In the individual financial statements of the investors the amounts that have been contributed to the joint venture will be shown as an investment. In the consolidated financial statements the interest in the joint venture will be proportionally consolidated, irrespective of the actual amounts invested by each investor. Therefore, Textures will include  $\$2,250,000 (30\% \times \$7,500,000)$  in non-current assets and  $\$330,000 (30\% \times \$7,500,000)$ \$1,100,000) in current assets.



# Solution 8

(a) The objective of IFRS3 is to ensure that when a business entity is acquired by another, all the assets and liabilities that existed in the acquired entity at the date of acquisition are recorded at fair values reflecting their condition at that date. The difference between the fair values of the net assets and the cost of the acquisition is recognised as goodwill or negative goodwill.

There is therefore a clear need for guidance as to which assets and liabilities would be permitted to be included in a fair value exercise and how these would be valued. This should help to ensure consistency and comparability in the calculations of fair values.

- (b) The main relevant provisions of IFRS3 are as follows:
  - 1. The assets and liabilities of a subsidiary acquires should be valued at their fair values. However, only those assets/liabilities that existed at the date of acquisition should be recognised. No attempt should be made to provide for any liability which would result from the acquirer's future intentions for the acquiree.
  - 2. The acquiree should be valued using the acquirer's accounting policies.
  - 3. The fair value of liabilities should also exclude provisions for future operating losses and reorganisation/restructuring costs.
  - 4. The method of calculation of assets should be as follows: Non-monetary assets at lower of replacement cost or recoverable amount reflecting the current condition of the assets.

- Monetary assets should be based on amounts expected to be received with the possibility of discounting long-term assets to their present value.
- 5. The fair value of the purchase consideration should represent the actual cash paid plus the present value of any deferred consideration plus the market value of the shares taken up on acquisition.



# Solution 9

(a) The bond is repayable and so contains a present obligation to transfer future economic benefit, it is therefore a financial liability. In accordance with IAS 39 it will be held at amortised cost using the effective interest rate. The effective rate of interest attached to the zero-coupon bond is:

$$\frac{10,000,000}{14,025,245} = 0.713 = 7\%$$
(using PV tables)

Year	Carrying value of	Income statement	Carrying value of
	instrument at 1 Jan.	charge	instrument at 31 Dec.
	\$	\$	\$
1	10,000,000	700,000 (7%)	10,700,000
2	10,700,000	749,000 (7%)	11,449,000

(b) This instrument is a hybrid, containing both a liability and an equity component. IAS 32 requires that the elements be recorded separately. The liability should be recorded at the value that is equivalent to the PV of a similar instrument that does not have conversion rights and then the difference is accounted for as equity.

It will be recorded as:

Dr	Bank	\$6,000,000
Cr	Non-current liabilities (W1)	\$5,681,520
Cr	Other reserves (within equity)	\$641,520

Being the initial recording of the convertible instrument.

(W1) Fair value of equivalent non-convertible instrument Simple rate for 3 years at 6% = 0.840Cumulative rate for 3 years at 6% = 2.673

	\$000
PV of principal repayable 31/12/X3	5,040,000
$(3,000 \times \$2,000 \times 0.840)$	
PV of interest annuity for 3 years	641,520
	5,681,520
Equity element (balancing figure)	318,480
Total consideration received	6,000,000



# Solution 10

(a) The weighted average of ordinary shares in issue:

To 30 September 20X4:  $5,700,000 \times 8/12$ From 30 September 20X4 to 31 January 20X5:  $6,900,000 \times 4/12$  3,800,000 2,300,000 6,100,000 Earnings attributable to ordinary shareholders = \$1,750,000 - \$200,000 (preference share dividend) = \$1,550,000.

Earnings per share 
$$=$$
  $\frac{\$1,550,000}{6.100,000} = 25.4$ ¢

(b) 20X3 EPS as originally stated:

$$ESP = \frac{810,000}{3,750,000} = 21.6$$
¢

Restatement of 20X3 figure shown as comparative in the 20X4 financial statements – the 20X3 figure should be adjusted by the inverse of the bonus fraction.

Bonus fraction = 
$$4/3$$
  
Inverse of bonus fraction =  $3/4$ ;  
Restated EPS: $3/4 \times 21.6$ ¢ =  $16.2$ ¢

(c) Theoretical ex-rights fair value per share:

Theoretical ex-rights fair value per share: \$13.02/7 = \$1.86 per share.

Bonus fraction = 
$$\frac{\text{Fair value of one share prior to rights issue}}{\text{theoreticalex-rights fair value per share}} = \frac{1.90}{1.86}$$



# Solution 11

The substance of the transaction is that Jake has borrowed \$5 million against the security of a piece of freehold land. The land will be repurchased by Jake and the price it will pay increases over time. In this case, the increase each year in the repayable amount reflects an interest charge. IAS 39 *Financial Instruments: Recognition and Measurement* requires initial recognition of the liability, and the related interest expense should be recognised over the relevant period. This is accounted for in the year ended 31 January 20X5 as follows:

	\$'000	\$'000
DR Suspense account	5,000	
CR Non-current liabilities		5,000
DR Interest expense for year ( $$6 \text{ m} - 5 \text{ m}$ )	1,000	
CR Non-current liabilities		1,000

The preference shares issued, while non-redeemable, contain a present obligation to transfer future economic benefit as the dividend is cumulative and will ultimately be paid. In accordance with IAS 32, the shares will therefore be included as a liability in the financial statements. IAS 39 requires that financial liabilities be initially recorded at the net proceeds ie total proceeds less transaction costs. The debit to share premium will be reversed and the shares recorded as:

Dr	Suspense	\$10,000,000
Cr	Non-current liabilities	\$9,950,000
Cr	Share premium	\$50,000



# **Solution 12**

This is an example of a fair value hedge. Black have entered into a hedging arrangement as it wants to minimise the risk of the value of the AFS investment falling as a result of a fall in value of the share price.

In 20X7 the available for sale asset is recorded as normal with the gain of \$200,000 being recorded in reserves, in accordance with IAS 39:

Dr	Available for sale investment	\$200,000
Dr	Other reserves	\$200,000

This gain of \$200,000 will be shown within other comprehensive income for the year ended 31 December 20X7.

In 20X8 an effective hedge exists to cover any fall in the value of the shares due to general market conditions. The derivative has a positive value and is therefore an asset held at fair value through profit or loss. This hedged item is the AFS but only the effective part of the hedge can be offset in the income statement. Any effective part or any loss not covered by hedge is recorded according to the normal rules for the available for sale asset, ie to reserves. The recording for 20X8 is:

Dr	Financial asset – derivative	\$250,000
Cr	Gain on derivative (IS)	\$250,000

Being the accounting for the derivative

Dr	Loss on hedged investment	\$250,000
Dr	Other reserves	\$20,000
Cr	Available for sale investment	\$270,000

Being the accounting for the AFS investment



# **Solution 13**

(a)

#### Memorandum

*To*: Assistant accountant

From: Management accountant

Date:

Subject: Financial instruments – preference shares
Preference shares are, in substance, similar to a debt instrument. They are issued on the understanding that they will receive a fixed dividend and will be redeemed at a specified amount on an agreed date. It is likely that IAS 32 would require these instruments to be recognised as a financial liability.

In the income statement, the finance charge should be calculated as the effective rate applied to the carrying value of the instrument. However, this charge represents the difference between the net proceeds and the total payments made during the life of the instrument. It will therefore incorporate not only interest charges but also the initial issue expenses, as well as any premiums payable at the end of the instrument's life.

The carrying value of the non-equity shares will increase each year by the difference between the effective interest charge and the dividends paid in cash. At the end of the instrument's life the amount outstanding on the statement of financial position should therefore represent the cash that must be paid to extinguish the full debt at the time.

Signed: Management accountant

### (b) Short – finance cost for each of the 5 years to 30 September 20X8

	\$'m	\$'m
Total payments over the life of the		
instrument		
$10m \times $1.35$		13.5
Dividends $0.4m \times 5$ years		2.0
•		15.5
Net proceeds		
Proceeds on issue	10.0	
Less issue costs	0.1	
		9.9
Finance charge		<u>5.6</u>

The spreading of the annual finance cost is as follows:

	Opening balance	Finance charge (10%)	Dividend cash flow	Closing balance
	\$'000	\$'000	\$'000	\$'000
20X4	9,900	990	(400)	10,490
20X5	10,490	1,049	(400)	11,139
20X6	11,139	1,114	(400)	11,853
20X7	11,853	1,185	(400)	12,638
20X8	12,638	1,262*	(400)	13,500 redeemed
		<u>5,600</u>	2,000	
(*rounding	)			



# **Solution 14**

The amended version of IAS 19 permits alternative approaches in accounting for actuarial gains and losses:

1. The first option is the accounting treatment that was required by the original IAS 19. Actuarial gains and losses are not recognised immediately in the income statement except where they exceed certain parameters. Where the parameters in the standard are met, the gain or loss is recognised over the average remaining service lives of the employees. This may be a fairly lengthy period (for example, 10 or 15 years would not be unusual), so, even if the actuarial loss of \$7.2 million were to exceed the parameters, the impact on the financial statements is likely to be very small.

Where this option requires part of the loss to be recognised, it is recognised in the income statement, and so has a direct effect upon reported profit.

2. The standard permits entities to adopt any systematic method that results in faster recognition of actuarial gains and loss than stipulated in the first approach, provided that the same basis is applied to both gains and losses, and that the basis is applied consistently. Thus, entities are able to opt for a policy of recognising the whole of any actuarial gains or losses in the accounting period in which they occur. In CBA's case this would mean recognising the full amount of the \$7.2 million loss in the financial year ended 30 September 20X6. In such cases (where actuarial gains and losses are recognised in full as they are incurred), the standard requires that such gains and losses should be recognised in a 'Other Comprehensive Income', within the statement of comprehensive income.



# **Solution 15**

*To*: The board of directors of S *From*: Management accountant

Subject: The determination of the economic substance of a transaction

Date: 25 November 20X8

- (a) The substance of a transaction is determined by its likely effect on the assets and liabilities of the entity. A number of different scenarios are possible.
  - (i) An asset is created. An asset must meet the definition provided in the IASB Framework, that is, the transaction will result in the creation of future economic benefits controlled by the entity as a result of a past transaction or event.
  - (ii) It is probable that future economic benefits will materialise. If it is only possible that future benefits will materialise, then an asset would not be created even if it is likely that it may ultimately realise benefits to the reporting entity. (For example, revenue investments such as advertising, training, maintenance are expensed not capitalised.)
  - (iii) The cost or value of the asset can be reliably measured. In order for an asset to be capitalised it must have a cost/value that can be reliably measured. For example, a home-grown brand may not pass the test.

An additional aspect of applying the IASB *Framework* is considering to which party the 'risks' of ownership of the asset are attached. It is regarded as a 'significant indicator' of the party controlling the asset.

Subsequently, the asset will be removed from the statement of financial position if the 'risks and rewards' of ownership are transferred to another party, that is, the asset is derecognised.

If the risks and rewards are shared between two parties then the asset description and value may need to be changed. This occurs in a 'linked presentation' situation, for example, factoring of receivables, whereby advance non-returnable proceeds are paid to the original selling company. The proceeds are netted off on the face of the statement of financial position, usually in a boxed format.

(b) The appropriate accounting treatment of factoring depends on who bears the risks and rewards of ownership in the factoring contract. Questions such as who bears the risks of slow payments or bad debts and will the seller have to repay monies advanced by the factor must be answered.

The terms of the agreement between S and F need to be investigated as follows:

- (i) F only takes receivables after credit approval risk is still with S.
- (ii) Any debts not collected by F within 90 days are regarded as bad and reassigned to S with any advanced payments being recovered risk is with S.
- (iii) F charges interest, calculated on a daily basis on the outstanding balance cost to S.
- (iv) F administers the scheme and collects its fee from cash received from receivables clearly a reward to F but little risk and S pays the cost.

In summary, it would appear that the seller, S, carries all the risks since there is a full recourse by F to S for any bad debts and slow payments. F is providing a loan to S on the security of its receivables. Legal title may have passed but the commercial reality of the transaction is that the receivables should be disclosed as an asset of S until such time as they are cleared by a payment to F. The amount advanced by F should be disclosed as a liability. The cost of interest, administration and bad debts suffered by S should be disclosed on the face of the income statement.



# **Solution 16**

# Issue (a)

The loan is a monetary liability in the statement of financial position of Ant and IAS 21 – *The Effects of Changes in Foreign Exchange Rates* – requires that monetary items be translated at the rate of exchange in force at the year end date. This would mean restating the loan from its original carrying value of \$25 million (40 m Francos/1.6) to \$26,666,667 (40 m Francos/1.5). The resulting exchange loss of \$1,666,667 would be reported in the income statement as a financing item.

The net assets of the subsidiary would be translated using the rate of exchange in force at the year end date because the subsidiary is relatively independent of the parent on a day-to-day basis. Because the net assets of the subsidiary are the same as the loan balance, its closing dollar value would also be \$26,666,667. There would be an exchange gain of \$1,666,667 on the retranslation of the opening net assets which IAS 21 would require is taken to equity.

Where a foreign currency loan is used to finance a foreign currency equity investment then IAS 21 requires a form of hedge accounting to be used in the consolidated financial statements (as well as in the financial statements of the parent). Exchange differences arising on a monetary item that, in substance, forms part of the net investment in a foreign entity should be classified as equity until the disposal of the net investments. At that time they should be released to income along with the cumulative exchange differences on the relevant net investments.

The correcting journal entry will be:

**DEBIT**: Net assets

**CREDIT**: Long-term loans.

With \$1,666,667, no net exchange differences will be reported because the exchanges differences on the loan and the net investment are both taken to equity and they are equal and opposite.

# Issue (b)

The loan is a compound financial instrument and IAS 32 - Financial Instruments: Presentation - requires that such instruments be classified in two component parts in the statement of financial position of the issuer. This requirement is unaffected by the likelihood or otherwise that the holders of the instrument will exercise their conversion options. In this case, we are provided with the fair value of the option element (which does not change over the period) so the loan element can be derived by deducting the option element from the total initial carrying value of the instrument.

IAS 39 - Financial Instruments: Recognition and Measurement requires that financial liabilities should be initially measured at 'cost'. Cost is the proceeds received minus the issue costs. Therefore, in this case 'cost' is \$175.5 million (\$180 million - \$4.5 m). The loan element of the instrument is \$153 million (\$175.5 m - \$22.5 m). Since the loan is a held to maturity financial liability it should subsequently be re-measured at amortised cost using the effective interest method to measure the annual finance cost. The finance cost should be a constant percentage of the outstanding loan for each period.

In this case, the percentage can be found from tables:

- The initial loan amount is \$153 million (A).
- The terminal loan amount with no interim payments is \$270 million (B).
- A/B is 0.567.
- From tables this equates to an annual interest rate of 12%.

Therefore, the finance cost for the first year is \$18,360,000 (\$153 m  $\times$  12%) and the closing loan is \$171,360,000. The correcting journal entry that is required is:

	DR	CR
	\$'000	\$'000
Shareholders funds – initial entry	180,000	
Shareholders funds – option element		22,500
Long-term loans		171,360
Income statement – admin expenses		4,500
Income statement – finance cost	18,360	



# Solution 17

The charge to the income statement for 20X8 will be:

	\$'000	\$'000
Ongoing service cost		4,000
Unwinding of the discount	3,600	
Expected return on pension assets	(4,800)	
-		(1,200)
Net charge to statement		2,800

The 'corridor' for recognition of actuarial losses from prior years is the greater of:

- 10% of the opening market value of the scheme's assets:  $$40 \,\mathrm{m} \times 10\% = $4 \,\mathrm{m}$ .
- 10% of the opening present value of the scheme's liabilities:  $$44 \,\mathrm{m} \times 10\% = $4.4 \,\mathrm{m}$ .

It is clear that the unrecognised actuarial losses are less than \$4.4 million, so no recognition is appropriate for the current year.

The statement of financial position figures for the end of 20X8 will be:

	\$'000	\$'000
Market value of plan assets	42,000	
Present value of plan liability	(44,000)	
•		(2,000)
Actuarial differences not yet taken to		600
the income statement (see below)		
So net liability		(1,400)

### (W) Actuarial differences

	\$'000
Net difference brought forward (\$40 m-\$44 m)	(4,000)
Net charge to income statement for the year (see above)	(2,800)
Contributions for the year	3,400
Actuarial difference for the year – to balance	400
Net difference carried forward (\$42 m-\$45 m)	(3,000)

This means that the end unrecognised actuarial losses at the end of the year are \$600,000 (\$1,000,000 - \$400,000).

# **/**

# **Solution 18**

- (a) In times of increasing prices, historical cost accounting displays the following defects:
  - (i) Revenues are stated at current values, but they tend to be matched with costs incurred at an earlier date. Therefore, profit is overstated.
  - (ii) Where historical cost accounting is applied consistently, asset values are stated at cost less accumulated depreciation. Current values of the assets may be considerably in excess of net book value, with the result that the historical cost depreciation charge does not constitute a realistic estimate of the value of the asset consumed.
  - (iii) By the time monetary liabilities are repayable, the amount of the outflow in current value terms is less than the original inflow. An entity can therefore gain by holding current liabilities, but historical cost accounting does not recognise these gains. The opposite effect is experienced in respect of monetary assets.
  - (iv) Typically, in a time of rising prices, profits are likely to be overstated, and capital to be understated, thus giving rise to unrealistic measurements of return on capital employed.
- (b) The cost of sales adjustment comprises the additional amount of value, over and above value at historical cost, that is consumed at current cost. It represents an additional charge against profits, thus tending to reduce distributable earnings and ensuring that the business conserves the resources that allow it to continue to trade at current levels.

The depreciation adjustment is the difference between the historical cost accounting and current cost depreciation charges. Current cost depreciation is the value of the non-current asset consumption that has taken place during the year. In a time of rising prices it is a more realistic representation of the asset consumption. It tends to reduce distributable profits thus contributing to capital maintenance.

In the case of Do-it, there is a loss on net monetary position. As noted earlier in part (a) holding monetary liabilities in times of rising prices tends to give rise to gains, whereas holding monetary assets produces losses. Do-it appears, therefore, to have an excess of monetary assets over monetary liabilities, as the net effect is a loss.

The recognition of this loss produces a more realistic estimation of distributable profit, and thus contributes to capital maintenance.



# Solution 19

The convergence project: progress to date

Traditionally, the US has adopted a 'rule-book' approach to financial reporting standard setting, whereas the approach taken by the IASB, and its predecessor body, has been to encourage adherence to principles. This fundamental difference in approach made it appear, for a long time, as though the US would never accept international standards. However, the rule-book approach was found wanting in a series of financial scandals in the US in the late 1990s and early years of the 21st century. The climate was therefore amenable to a change in approach which would make convergence possible between US and international financial reporting standards.

In September 2002 the US standard setter (Financial Accounting Standards Board -FASB) and the IASB agreed to undertake a project which would have the objective of converging their accounting practices, reducing the number of differences between US GAAP and IFRS. This agreement (the 'Norwalk agreement') committed the parties to making their existing standards fully compatible as soon as practicable, and to co-ordinating their future work programmes. In order to address the first commitment, a short-term project was undertaken to remove some of the differences between existing standards. The second commitment was to be met by collaborating on the development of standards.

A memorandum of understanding between FASB and the IASB sets out a 'Roadmap of Convergence between IFRS and US GAAP 2006-8'. This is aimed at removing the need for reconciliation to US GAAP requirement for those companies that use IFRS and are registered in the USA.

Progress to date has been impressive. Projects undertaken jointly between FASB and IASB have produced the following:

- IFRS 5 Non-current Assets Held for Sale and Discontinued Operations
- IFRS 3 Business combinations
- IFRS 8 Operating Segments
- IAS 1 Presentation of Financial Statements: a revised presentation

There are several on-going projects that will run into the longer-term. For example, the amendment to IAS 1 noted above represents just a first phase in a larger project on financial statement presentation. Subsequent phases will address fundamental issues in presenting information and the issue of interim reporting.

Other longer-term projects include convergence of the conceptual frameworks and revenue recognition.

Finally, despite the high level of activity on convergence, it should be noted that many significant differences remain between US GAAP and IFRS.



# **Solution 20**

Arguments against voluntary disclosures by businesses in respect of their environmental policies, impacts and practices might include the following principal points:

The traditional view of the corporation is that it exists solely to increase shareholder wealth. In this view business executives have no responsibility to broaden the scope or nature of their reporting as doing so reduces returns to shareholders (because there is a cost associated with additional reporting).

From a public policy perspective, if governments wish corporations and similar entities to bear the responsibility for their environmental impacts, they should legislate accordingly. In the absence of such legislation, however, businesses bear no responsibility for environmental impacts, and in consequence there is no reporting responsibility either.

Voluntary disclosures of any type are of limited usefulness because they are not readily comparable with those of other entities. Therefore, it is likely that the costs of producing such disclosures outweigh the benefits to stakeholders.

The audit of voluntary disclosures is not regulated. Even where such disclosures are audited, the scope of the audit may be relatively limited, and moreover, its scope may not be clearly laid out in the voluntary report. Voluntary reports are not necessarily, therefore, reliable from a stakeholder's point of view.

Especially where voluntary disclosures are included as part of the annual report package, there is a risk of information overload: stakeholders are less able to identify in a very lengthy report the information that is relevant and useful to them.

Voluntary disclosures by business organisations, because they are at best lightly regulated, may be treated by the organisation in a cynical fashion as public relations opportunities. The view of the business's activities could very well be biased, but it would be quite difficult for most stakeholders to detect such bias.

It is questionable whether voluntary disclosures about environmental policies, impacts and practices would meet the qualitative characteristics of useful information set out in the IASB's Framework. The key characteristics are: understandability, reliability, relevance and comparability. Voluntary environmental disclosures might well fail to meet any of these characteristics and, if this is the case, it is highly questionable whether or not they merit publication.

# **Section B Solutions**



# Solution 21

# Requirements

(a) The financial asset falls into the category of loans and receivables, and, according to the standard, should be accounted for using the amortised cost method. The effective interest rate inherent in the financial instrument is used to calculate the annual amount of interest receivable, which is credited to the income statement. If an annual amount of interest is receivable this is credited to the financial asset (with the related debit to cash or receivable).

The other current asset in this case falls into the category of 'held-for-trading' and should be accounted for at fair value through profit and loss account. Where securities are actively traded, the statement of financial position amount (at fair value) is likely to differ from the amount at which the asset was originally recognised. Fair value differences are debited or credited to profit or loss, and appear in the income statement.

(b)

## AD: Consolidated statement of financial position as at 30 June 20X6

	\$	\$
ASSETS		
Non-current assets:		
Property, plant and equipment (1,900 + 680)	2,580,000	
Goodwill (W1)	360,000	
Investment in associate (W5)	106,160	
Financial asset (W2)	1,062,400	
		4,108,560
Current assets:		
Inventories (223 + 127)	350,000	
Trade receivables $(204 + 93 - 5)$	292,000	
Other current assets (W3)	26,800	
Cash in transit	5,000	
Cash $(72 + 28)$	100,000	
		_773,800
		4,882,360
EQUITY AND LIABILITIES		
Equity:		
Share capital	1,000,000	
Retained earnings (W7)	2,555,240	
		3,555,240
Non-controlling interest (W6)		168,120
Non-current liabilities		600,000
Current liabilities:		
Trade payables (247 + 113)	360,000	
Income tax $(137 + 62)$	199,000	
		559,000
		4,882,360

# Workings

# (W1) Goodwill on acquisition of BE

	\$
Cost of investment	880,000
Less: acquired $(300,000 + 350,000) \times 80\%$	(520,000)
	360,000

### (W2) Financial asset

Calculation of finance charge for year ended 30 June 20X6:

	\$
1 July 20X4 Proceeds of instrument	1,000,000
Year 1 finance charge 8%	80,000
Less: interest received ( $\$1,000,000 \times 5\%$ )	(50,000)
At 30 June 20X5	1,030,000
Year 2 finance charge ( $$1,030,000 \times 8\%$ )	82,400
Less: interest received ( $\$1,000,000 \times 5\%$ )	(50,000)
At 30 June 20X6	1,062,400

The balance is currently stated at \$980,000 (i.e., \$1,030,000 brought forward less the interest receipt of \$50,000). The following adjustment is required:

DR Financial asset	82,400
CR Interest receivable	82,400

The credit to interest receivable increases retained earnings by \$82,400 (see W7)

### (W3) Other current assets

Increase in fair value: 670¢ -625¢ =45¢  $\times 4,000$  shares = \$1,800

DR Other current assets 1,800 CR Fair value adjustments 1,800

The credit to fair value adjustments increases retained earnings by \$1,800 (see W7)

### (W4) Provision for unrealised profit

Unrealised profit in BE:  $$10,000 \times 30\% \times 40\% = $1,200$ 

This is deducted from the investment in associate (W5). The debit is split between group and minority shares:

	\$
Group $$1,200 \times 80\%$ (W7)	960
Minority $$1,200 \times 20\%$ (W6)	240
	1,200

#### (W5) Investment in associate

Goodwill on acquisition	\$
Investment at cost	104,000
Less: acquired $(100,000 + 102,000) \times 40\%$	(80,800)
Goodwill	23,200

The element relating to the non-controlling interest (20%) is excluded:  $\$23,200 \times 20\% = \$4,640$ 

Investment in associate:	\$
Cost of investment	104,000
Less: amount of goodwill relating to minority	(4,640)
Add: share of post-acquisition profit ( $$20,000 \times 40\%$ )	8,000
	107,360
Less: PURP (W4)	(1,200)
	106,160

### (W6) Non-controlling interest

	\$	\$
Net assets in BE	857,000	
Less: cost of investment in CF	(104,000)	
Add: share of net assets in CF ( $$222,000 \times 40\%$ )	88,800	
	$841,800 \times 20\%$	168,360
Less: share of provision for unrealised profit (W5)		(240)
		168,120

### (W7) Retained earnings

	\$
AD's retained earnings	2,300,000
Group share of post-acquisition earnings in BE:	
$(\$557,000 - 350,000) \times 80\%$	165,600
Group share of post-acquisition earnings in CF:	
$(\$122,000 - 102,000) \times 32\%$	6,400
Financial asset interest credit (W2)	82,400
Fair value increase – other financial asset (W3)	1,800
	2,556,200
Less: group share of provision for unrealised profit (W5)	(960)
	2,555,240



# **Solution 22**

### (a) Rag – memorandum

*To*: Assistant accountant *From*: Consolidation accountant

Date: 26 May 20X9

Subject: Treatment of Bobtail on consolidation

Assuming that all the shares in Tag and Bobtail carry equal voting rights at general meetings, the structure of the Rag group is as follows:

If Rag is actively involved in Bobtail's strategic decision-making, then a 40% share-holding should give Tag significant influence (per IAS 28) over the operating and financial policies of Bobtail. This means that Bobtail is an associate of Tag, by virtue of its direct shareholding.

Of greater importance to the Rag group is Rag's 30% indirect shareholding in Bobtail, which will need to be included in Rag's consolidated income statement under the equity accounting requirements of IAS 28. It has already been established that Rag has dominant influence over its subsidiary Tag. This means that Rag, indirectly through Tag, has significant influence over Bobtail, thereby making Bobtail an associate of Rag. The proportion of Bobtail's results not belonging to the Rag group will be automatically eliminated as part of the 25% non-controlling interest share of Tag's profits. This will leave the Rag group with its 30% share  $(75\% \times 40\%)$  of the results of Bobtail, in accordance with its indirect shareholding. In this way, the significant influence that Rag has over Bobtail is reflected in Rag's consolidated income statement. Signed: Consolidation accountant

(b) Working schedule for the consolidated income statement for the year ended 31 March 20X9

	Rag	Tag		Group	Bobtail
	\$'000	\$'000		\$'000	\$'000
Revenue	65,000	50,000		115,000	100,000
Less: Inter-group	(8,000)			(8,000)	
	57,000	50,000		107,000	
Cost of sales	$\overline{(35,000)}$	(28,000)		(63,000)	(82,000)
Less: Inter-group	8,000			8,000	
	(27,000)	(28,000)		(55,000)	
Gross profit	30,000	22,000		52,000	18,000
Provision for unrealised profit					
on inventory	(20)	(4)		(24)	
	29,980	21,996		51,976	18,000
Other operating expenses	(15,000)	(11,000)		(26,000)	(9,000)
	14,980	10,996		25,976	9,000
Share of associate's operating profit		3,600	(40%)	3,600	
	14,980	14,596		29,576	
Interest payable	(3,200)	(1,800)		(5,000)	
Share of interest payable		_(480)	(40%)	(480)	(1,200)
Profit before taxation	11,780	12,316		24,096	7,800
Taxation	(3,600)	(2,800)		(6,400)	
Share of associate's taxation		(960)	(40%)	(960)	(2,400)
Profit for the period	8,180_	8,556		16,736	5,400

1. Provisions for unrealised profit on inventory

### Rag to Tag and Tag to Bobtail

	Statement		Statement		Income state	ement
	of financial		of financial			
	position		position			
	20X9		20X8		20X9	
Tag	$2,200 \times 1/11$	200	$1,980 \times 1/11$	180		20
Bobtail	1,100 = 1/11	100	$990 \times 1/11$	90		10
			$90 \times 40\%$	36	$\times$ 40%	4



# **Solution 23**

(a) The convertible bond issue is a compound or hybrid financial instrument, according to IAS 32 Financial Instruments: Presentation. It is a hybrid in the sense that is contains both a liability and an equity element. The liability embodies the issuer's obligation to pay interest and to redeem the bond. The equity element comprises the bond holder's right to claim a share of the issuer's equity. The appropriate accounting treatment is to determine the fair value of the liability element and to recognise this as part of liabilities. The residual difference between the proceeds of the instrument and the fair value of the liability portion should be recognised as part of equity.

The IASB Framework includes 'substance over form' as an important characteristic of financial statements. The required treatment of compound financial instruments follows this approach. The form of the convertible bond is that of a liability, but in substance the instrument contains elements of both debt and equity, and both should be recognised. Another important characteristic is 'faithful representation' and the IASB argues that the required accounting treatment in IAS 32 of this type of financial instrument is a more faithful representation.

(b) AX Group: Summary consolidated statement of financial position as at 31 October 20X7

	\$'000	Ref to workings
ASSETS		
Non-current assets		
Goodwill	4,000	
PPE (\$20,000 + \$8,900 + \$5,000 + \$500 - \$250 (W3))	34,150	
Current assets $(\$34,500 + \$9,500 + \$4,700)$	48,700	
	86,850	
EQUITY & LIABILITIES		
Equity		
Called up share capital (\$1)	20,000	
Equity component of bond issue	528	
Retained earnings	23,150	
	43,678	
Non-controlling interest	4,400	
Non-current liabilities (9,472 (W6) + 2,400 + 1,000)	12,872	
Current liabilities $(18,000 + 5,000 + 2,700 + 400)$	25,700	
	86,850	

# 1. Goodwill on acquisition

	\$'000
Investment in CY	
Cost of investment	8,000
Acquired ( $\$4,000 + \$3,500$ ) $\times$ 80%	(6,000)
Goodwill	2,000
Less disposed of	(500)
	1,500
Investment in EZ	
Cost of investment	7,500
Acquired ( $\$3,000 + \$1,500 + \$500 \text{ FVA}$ ) × 100%	(5,000)
Goodwill	2,500

### 2. Adjustment to parent's equity on disposal of 20% of shareholding

	\$ 000
FV of consideration received	(4,000)
Increase in NCI in net assets at disposal date (20% × \$11m (W3))	2,200
Adjustment to parent's equity	(1,800)

### 3. Net assets of CY at disposal date

	\$ 000
Share capital	(4,000)
Retained earnings at 31 October 20X7	6,500
-	10,500)

# 4. Consolidated retained earnings

	\$1000
AX's retained earnings	18,000
Adjustment to parent's equity on disposal of shareholding	1,800
Share of CY's post-acquisition profit ( $\$7,000 - \$3,500$ ) $\times$ 60%	2,100
Share of EZ's post-acquisition profit ( $\$3,000 - \$1,500$ ) $\times$ 100%	1,500
Additional depreciation on FV adjustment	(250)
•	23,150)

# 5. Non-controlling interest $40\% \times \$11,000 = \$4,400$

# 6. Hybrid financial instrument

	\$'000
PV of capital element of bond issue	
Principal $$10,000 \times 0.816$ (from tables)	8,160
Interest ( $$10,000 \times 5\%$ ) $\times$ 2.624 (from tables)	1,312
Total to be recognised as a long-term liability	9,472
Equity element (balancing figure)	528
Total value of financial instrument	10,000

# /

# **Solution 24**

(a) Holmes: cash flow statement for the year ended 30 September 20X9

	\$'m	\$'m	Preparing
Net cash flow from operating activities (W1)		105	₹
Cash flow from investing activities			Ž
Dividends received from associates (W5)	7		$\overline{\Box}$
Investment income	6		Ö
Purchase of property, plant and equipment (W6)	(8)		<i>R</i> →
Sale of property	100		<b></b>
Purchase of subsidiary $(100 - 10)$	(90)		$\nabla$
•		15	<b>\begin{array}{c}</b>
Cash flow from financing activities			examination
Capital element of finance lease rentals (W7)	(25)		
Repayment of loan	(90)		$\overline{\mathbb{Q}}$
1 /	<u> /</u>	(115)	_
Increase in cash and cash equivalents in period (W8)		5	

# 1. Cash flow from operating activities

	\$'m
Profit before tax from group entities	
(150 - 50 + 10  other income)	110
Exceptional item	(10)
Finance cost	50
Depreciation	58
Increase in inventory ( $$15 \mathrm{m} - $30 \mathrm{m}$ )	15
Increase in receivables ( $$20 \text{ m} - $25 \text{ m}$ )	5
Increase in payables ( $$11 \text{ m} - $15 \text{ m}$ )	(4)
Investment income	(6)
Interest payable	(50)
Dividends paid	
Holmes shareholders	(25)
Non-controlling interest (W3)	(6)
Tax paid (W4)	(32)
-	105

# 2. Reconciliation of non-controlling interest

	\$'m
Profit for the year	10
Increase due to acquisition of Watson	21
Movement in statement of financial position	(25)
Dividend for the year	6

# 3. Cash flow relating to tax

	\$'m
Charge in income statement	35
Movement in liability	
Current	(2)
Deferred	(6)
Arising on acquisition	5
Paid	32

### 4. Dividends received from associates

\$'m
17
(10)

### 5. Purchase of property, plant and equipment

	\$'m
Movement in assets	
Owned plant	30
Leased plant	20
Fixtures	_
Acquisitions under finance leases	(40)
Acquired with Watson	(60)
Depreciation	58
Purchased for cash	8

### 6. Capital element of finance lease rentals

	\$'m
Increase in liability	
Current	5
Non-current	10
New debt	(40)
Capital repayments	(25)

#### 7. Increase in cash and cash

	\$'m
Cash in hand	5
Bank overdraft	50
Short-term investments	(50)
	5

#### (b) Memorandum

*To*: Managing director

From: Management accountant

Date:

*Re*: Cash flow statements

A cash flow statement is regarded as a key measure of performance. Even though it is often prepared from the other primary statements it presents information that is not readily available from the income statement and the statement of financial position. A particularly important function of the statement is that it shows how the entity has accumulated cash and how that cash has been used. This enables the user to see the extent to which financing and investment have been matched with each other.

Another key factor that makes the cash flow statement extremely useful is that the concept of 'cash flow' is well understood by users. Many users misunderstand the meaning of profit as they do not fully appreciate the matching principle that is involved in arriving at profit for the period. Cash flow, however, is something that is less open to misinterpretation. Therefore it has a key role to play in providing useful financial reports.

Signed: Management accountant



# AT Group: consolidated income statement for the year ended 31 March 20X7

	\$'000	Ref to working
Revenue	3,783	(1)
Cost of sales	(2,800)	(3)
Gross profit	983	
Distribution costs	(141.7)	(4)
Administrative expenses	(473)	(4)
Interest received	2	
Loss on investment in financial asset	(4.2)	(5)
Finance costs	(118.2)	(6)
Share of profit of associate	6.9_	(7)
Profit before tax	254.8	
Income tax expense	(94)	(8)
Profit for the period	160.8	
Attributable to:	\$'000	Ref to working
Equity holders of the parent	141.1	
Non-controlling interest	19.7	(9)
	160.8	

# Workings

### (W1) - Revenue

	\$'000
AT	2,450
BU	1,200
$CV (1/3 \times 675)$	_225
	3,875
Less: Intra-group sales of inventories	(80)
Less: Intra-group sales of admin, services	(12)
	3,783

### (W2) - Provision for unrealised profit

Closing intra-group inventories =  $\$80,000 \times 25\% = 20,000$ . Unrealised profit =  $20\% \times \$20,000 = \$4,000$ .

### (W3) - Cost of sales

	\$'000
AT	1,862
BU	870
$CV (1/3 \times 432)$	144
	2,876
Add: provision for unrealised profit (W2)	4
Less: Intra-group sales of inventories	(80)
	2,800

### (W4) - Distribution costs and administrative expenses

	Distribution costs \$'000	Administrative expenses \$'000
AT	94	280
BU	22	165
$CV (1/3 \times 77)/(1/3 \times 120)$	25.7	_40
	$\overline{141.7}$	$\overline{485}$
Less: Intra-group purchases of admin services		(12)
	141.7	<u>473</u>

### (W5) - Loss on investment in financial asset

Loss on investment in EX: 4,000 shares at (1332 - 1227) = 4,200.

#### (W6) - Finance costs

Yle 31 March	Principal b/fwd	Effective interest @ 9%	Interest charge	C/fwd
2005	950.0	85.5	(50)	985.5
20X6	985.5	88.7	(50)	1,024.5
20X7	1,024.5	92.2	(50)	1,066.4
2008	1,066.4	96.0	(50)	1,112.4
2009	1,112.4	100.1	(50)	1,162.5

The amount for inclusion in the income statement for the year ended 31 March 20X7 is \$92.2 + interest of \$26 on short term borrowings. Total = \$118.2.

### (W7) - Share of profit of associate

Profit after tax  $\times 3/12 \times 35\% = $79 \times 3/12 \times 35\% = $6.9$ 

### (W8) - Income tax

	\$'000
AT	40
BU	50
$CV (1/3 \times 12)$	4
	94

### (W9) - Non-controlling interest

6 months to 30 6 months to 31 September 20X6 March 20X7

### Adjusted profit of BU:

Profit for the period, as stated 95

Less: provision for unrealised profit 
$$(4)$$

Split 1:1  $(4.5)$ 

Less: loss on financial asset  $(4.2)$ 
 $(4.2)$ 
 $(4.3)$ 

## Minority share of profit:

6 months to 30 September 20X6:	$45.5 \times 25\%$	=	11.4
6 months to 31 March 20X7:	$41.3 \times 20\%$	=	8.3
			19.7

# **/**

# Solution 26

(a) Earnings per share for the year ended 31 December 20X4:

$$\frac{\$3,676,000}{2,800,000} = 131.3$$
¢ per share

Earnings per share for the year ended 31 December 20X5:

$$\frac{\$2,460,000}{2,850,000} = 86.3$$
¢ per share

(W1) Weighted average number of shares in issue

$10/12 \times 2,800,00$	2,333,333
2/12 × 3,100,000	516,667
	2,850,000

(b) **Report** 

*To*: Investor *From*: Adviser

### The financial statements of the BZJ Group for the year ended 31 December 20X5

#### Financial performance

The performance of the group has declined sharply. Revenue has fallen by 0.8% between 20X4 and 20X5. Gross, operating and pre-tax profit margins are all substantially lower in 20X5 than in the previous year: gross profit has fallen from 15.7% to 14.4%; operating profit has fallen from 5.5% to 4.5%; pre-tax profit margin has fallen from 4.7% to 3.2%. The fall in revenue is particularly striking, given the large amount of investment in non-current assets that has taken place. Margins may have been adversely affected by additional depreciation charges arising because of the increase in non-current assets. It is also possible that the expansion into new markets and the new storage products will result in permanently lower margins. Return on equity (ROE) and return on total capital employed (ROTCE) have both dropped by significant margins: ROE has fallen from 21.5% to 12.0%, and ROTCE has fallen from 15.3% to 8.5%. Investors will be disappointed with the significant drop in the amount of dividend received. The dividend payout ratio is also substantially lower.

The amount of interest payable has increased by over \$500,000 during the year, because of the large increase in borrowings intended, according to the chairman's statement, to fund business growth. Interest cover has halved, but the group's current levels of earnings cover the charge 3.7 times, which provides a reasonable margin of safety. However, it is worth noting that the average interest charge (taking interest payable as a percentage of long- and short-term borrowings) is less than 5% in 20X5. This may suggest that borrowings have reached their current level quite recently, and that the interest charge in the 20X6 financial statements will be significantly higher.

The analysis of financial performance suggests that, with falling margins and rising interest, potential returns from the business are likely to be more volatile in future.

#### Financial position

A very large increase in non-current assets has taken place. The increase of nearly \$20 million appears to be mostly accounted for by purchases of new assets, although a revaluation of \$2 million has taken place during the financial year. The investment in non-current assets has been financed in part by an increase in long-term borrowings of \$10 million, and also by an issue of share capital at a premium which raised \$1.5 million in funds. Current liabilities have increased by around \$7 million and the business has moved from a position of holding cash at the end of 20X4 to quite substantial short-term borrowings at the end of 20X5.

Inventories have increased by almost \$10 million, and the turnover period is much greater at 131.5 days than at the end of 20X4. It could be that the business is building up stocks of its new products; alternatively, it is possible that the new ranges have not sold as well as expected, in which case the build-up of inventories is a worrying sign. Receivables turnover has improved; this is the only element of working capital management that shows any sign of improvement.

The current ratio is probably adequate at its present level, but it, too, shows a significant decline from the previous year.

Even before the current year's expansion programme, gearing was at a high level. It has increased still further to the point where borrowings represent over 80% of equity. The business has no cash at the year end, and it may find that it becomes difficult and expensive to obtain further loan capital. There is an urgent need to improve working capital management and, especially, to start turning over inventories.

#### Chairman's comments

The chairman refers to 'growth in the business'. However, closer examination of the financial statements shows that the growth is all in statement of financial position items, especially inventories, trade and other payables and non-current assets. The increased investment in fixed and working capital has not, by the 20X5 year end, started to yield any benefits in terms of improved performance; the non-current asset turnover ratio has declined sharply from 4.99 in 20X4 to 2.76 in 20X5. All the performance indicators derived from the income statement are in decline. It is possible that the expansion into new markets and products had not begun to yield benefits by the end of 20X5, but investors and other stakeholders will expect the promised improvements to start to pay off in 20X6.

The chairman also refers to the successful issue of further ordinary shares only 2 months before the year end. This is, indeed, reassuring, as it suggests that investors are prepared to accept the high level of gearing, and that they are prepared to place confidence in the directors' strategies.

In summary, the business is in no immediate danger of failing, but the position could become critical if management's current expansionary policies do not succeed.



# **Solution 27**

#### (a) Memorandum

To: The board of SpreaderFrom: Chief accountantDate: 21 May 20X7

Subject: Financial performance of the Spreader group

Group revenue has risen by 4% on last year, but the cost of sales has increased by 13.6%, resulting in a reduction of gross profit of 3.8%. Operating costs are 5.6% up on last year and, consequently, operating profit is 15% down at \$10 million. Analysed to business segments, this shows the following:

	To	tal	Spre	ader	As	ia	Eur	оре
	20X7	20X6	20X7	20X6	20X7	20X6	20X7	20X6
Operating profit to								
external revenue, %	20.0	24.6	23.0	34.0	16.6	16.0	21.4	21.7
ROCE%	24.0	30.6	20.0	44.0	25.0	24.0	30.0	25.0

Spreader revenue has dropped by 25% (\$5 million) but this has been more than replaced by increased revenue in Asia and Europe. More inter-segment sales in Asia have compensated for a reduction in Spreader sales within the group. Segment operating profit in Spreader has fallen by 50%, but in Asia and Europe it has increased by 25% and 20% respectively. Common costs have increased by 25% this year.

The fall in group profit is influenced by two major factors:

- (i) Revenue lost by Spreader has been replaced by less profitable sales in Asia and Europe.
- (ii) The profitability of sales by Spreader (26% of total revenue) has fallen significantly.

During the year, investment has been concentrated on Spreader (up by \$1.5 million or 11%) and Asia (up by \$1 million or 20%).

Investment has been targeted on Spreader where sales are falling, and Asia, where the profit margin is smallest. The ROCE on activity by Spreader shows a significant fall. The funds to finance this investment are adequately covered by retained profit, but interest has increased by 11% over last year.

Overall, net profit before tax is down by 17% and the tax charge is reduced to reflect lower profits and tax allowances on the new investment. Despite the fall in profit, the payout ratio has increased from 43% to 48% with a consequent impact on retained profit.

(b) Geographical segmental information should be interpreted with caution since economic conditions, terms of trade and levels of competition are not the same across the world. Transfer pricing decisions may also influence the profitability of inter-segment sales. The reliability of segmental analysis will be further limited by the fact that considerable common costs are not allocated, and there may be a defect in the logic on which geographical segments are identified.

Signed: Chief accountant



# **Solution 28**

*To*: Members of the Lending Committee

From: Accounting Adviser

Subject: TYD's financial statements for the year ended 30 September 20X6

(i) Treatment of two significant items in TYD's financial statements

The principle at issue in the case of the first transaction is that of 'substance over form'. While there is currently no IFRS that deals specifically with substance over form, the principle is recognised as contributing to the reliability of financial statements in the IASB's *Framework* statement. Transactions and other events should be accounted for and presented in accordance with their substance and economic reality, and not merely their legal form. The legal form of this transaction, a sale and repurchase agreement, is that of a contract for sale of inventories. However, the 'sale' does not meet the criteria for treatment as a sale set out in IAS 18 *Revenue*. In substance, the transaction is a secured loan of \$85,000 from HPS to TYD. The difference between the amount advanced at 30 September 20X6 (\$85,000) and the amount for which the inventories will be repurchased after two years (\$95,000) represents, effectively, the interest payable on the loan. The existence of the option, exercisable by the bank, to ensure repurchase after two years by TYD is a persuasive indicator of the true substance of the transaction. The facts that the inventories remain on TYD's premises,

and that TYD bears the cost of insuring them, provide further supporting evidence that TYD continues to bear the risks and rewards of ownership of the inventories. The correct accounting treatment of this transaction is to treat it as a long-term loan.

The question of the transfer of the risks and rewards of ownership is also an issue in determining the true nature of the disposals of inventories on a sale or return basis. As noted above IAS 18 *Revenue* states that revenue can be recognised provided that a set of conditions have been satisfied. One of those conditions is that the risks and rewards of ownership have been transferred to the buyer. Another is that the selling entity should retain no effective control over the goods. Where the option is open to buyers to return the goods, it is likely that neither of these important conditions has been fulfilled, and that the sales cannot be recognised until and unless there is no possibility of the goods being returned.

# (ii) Adjustment of TYD's financial statements

Both of these transactions are examples of creative accounting techniques that would not be permissible under IFRS regulation. In order to be able to fairly assess the loan application, it is necessary to adjust the financial statements, as follows:

TYD: Income statement for the year ended 30 September 20X6

	\$'000	Adjustment \$'000	Trans ref	Adjusted \$'000
Revenue	600	-85	1	475
		(W1) - 40	2	
Cost of sales	450	(W1) - 32	2	333
		-85	_1_	
Gross profit	150			142
Expenses	63			63
Finance costs	<u>17</u>			_17
Profit before tax	70			62
Income tax expense	<u>25</u>			25
Profit for the period	45	(W1) - 8	2	_37

TYD: Statement of financial position at 30 September 20X6

	\$'000	\$'000	Adjustment \$'000	Trans ref	Adjusted \$'000
ASSETS					
Non-current assets:					
Property, plant and equipment		527			527
Current assets:					
Inventories	95		(W1) + 32	2	212
			+ 85	1	
Trade receivables	72		(W1) - 40	2	32
Cash	_6				6
	_	173			
		700			777

EQUITY AND LIABILITIES					
Equity:					
Called up share capital	100				100
Retained earnings	245		(W1) - 8	2	237
-		345			
Non-current liabilities:					
Long-term borrowings		180	+85	1	265
Current liabilities:					
Trade and other payables	95				95
Bank overdraft	80				80
	_	175			
		$\frac{1}{700}$			777

(W1) Sale or return items

40% of the sales cannot be recognised:  $40\% \times \$100,000$ . Remove from trade receivables and from sales.

The related cost of sales figure is  $$40,000 \times 80\%$  (that is, deducting profit margin) = \$32,000. Remove from cost of sales and add to inventories in the statement of financial position.

The net effect on profit is to remove \$8,000.

#### Examiner's note:

The income statement and statement of financial position have been adjusted to show the impact of the adjustments; however, there are many other valid ways of setting out the adjustments, for example, using journal entries, that might be quicker under exam conditions. Credit will be given for correct understanding of the adjustments, and not for a particular way of setting them out.

#### (iii) Key ratio calculations and analysis

The key ratio calculations are shown in the following table:

	Before adjustment		After adjustment
$\frac{180 + 80}{(180 + 80 + 345)} \times 100$	43.0%	$\frac{265 + 80}{(265 + 80 + 337)} \times 100$	50.6%
Current ratio $\frac{173}{175}$	0.99:1	$\frac{(212+32+6)}{175}$	1.43:1
Quick ratio $\frac{(72+6)}{175}$	0.45:1	$\frac{(32+6)}{175}$	0.22:1
Profit margin $\frac{70}{600} \times 100$	11.7%	$\frac{62}{475} \times 100$	13.1%

It is clear from a very quick examination of the financial statements that TYD is quite highly geared. The gearing ratio before making any adjustments is 43%, close to the point where the application is likely to be rejected without discussion. After adjustment, gearing is at the unacceptably high level (for us) of 50.6%.

Although the current ratio improves substantially after adjustment, the already low quick ratio worsens. Also, it should be noted that the uplift in current assets relates to inventories which, after adjusting the financial statements, amount to 63% of cost of sales. It is quite likely that the inventories could not be rapidly realised in case of default, and so for our purposes, the quick ratio is likely to be a more useful guide.

The profit margin improves after adjustment. However, all other things being equal, it would be due to deteriorate in 20X7 and 20X8 because of the additional interest charge arising from the sale and repurchase agreement.

Taking these various points into consideration, the appropriate course of action is likely to be to reject TYD's application for loan finance.



### **Solution 29**

(a) (i) DPC's summary projected financial statements to include the acquisition of an associate interest in PPS:

#### Summary projected income statement for the year ended 31 December 20X8

	Projected:
	20X8
	\$'000
Revenue	60,300
All expenses including income tax	(55,300)
Share of profit of associate (W1)	_280
Profit for the period attributable to equity holders	5,280

#### Summary projected statement of financial position at 31 December 20X8

	Projected:
	20X8
	\$'000
Non-current assets	50,400
Investment in associate (W2)	3,780
Current assets $(82,000 - 1,000)$	81,000
	135,180
Equity (W3)	31,680
Long-term liabilities $(10,000 + 2,500)$	12,500
Current liabilities	81,000
	135,180

(ii) DPC's summary projected financial statements to include the acquisition of a subsidiary interest in PPS:

#### Summary projected income statement for the year ended 31 December 20X8

	Projected:
	20X8
	\$'000
Revenue (60,300 + 10,200)	70,500
All expenses including income tax $(55,300 + 9,500)$	(64,800)
Non-controlling interest in PPS ( $700 \times 40\%$ )	(280)
Profit for the period attributable to equity holders	5,420

### Summary projected statement of financial position at 31 December 20X8

	Projected:
	20X8
	\$'000
Non-current assets $(50,400 + 9,800 + 4,020)$ (W4)	64,220
Current assets $(82,000 + 16,000 - 3,000)$	95,000
	159,220
Equity (W5)	31,820
Non-controlling interest in PPS $(4,000 \times 40\%)$	1,600
Long-term liabilities $(10,000 + 9,300 + 3,000)$	22,300
Current liabilities (91,000 + 12,500)	103,500
	159,220

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¢2000

# **Workings**

- 1. Share of profits of associate:  $\$700,000 \times 40\% = \$280,000$
- 2. Investment in associate:

	\$'(
Investment at cost	3,5
Share of post-acquisition profits	2
	3,7

# 3. Equity

	\$ 000
As given in the question	31,400
Share of post-acquisition profits in associate	280
·	31,680

### 4. Goodwill on acquisition

	\$ 000
Investment at cost	6,000
Share of net assets acquired:	
$([100 + 3,200] \times 60\%)$	1,980
Goodwill on acquisition	4,020

### 5. Equity

	\$'000
As given in the question	31,400
Share of post-acquisition profits in subsidiary	420
	31,820

(b)		DPC existing		DPC + PPS		DPC + PPS
				associate		subsidiary
EPS	5,000/10,000	50¢	5,280/10,000	52.8¢	5,420/10,000	54.2¢
Gearing	10,000/31,400	31.8%	12,500/31,680	39.5%	22,300/33,420	66.7%
	$\times$ 100		$\times$ 100		$\times$ 100	
NCA	60,300/50,400	1.20	Same	1.20	70,500/64,220	1.10
turnover						

(d) Earnings per share would be improved under either acquisition scenario. Non-current asset turnover would be reduced if the investment in a subsidiary interest were to be acquired in PPS. However, it is the gearing ratio that shows the biggest potential differences. The gearing ratio if PPS were acquired as an associate worsens because of the additional borrowing of \$2.5 million required to acquire the shareholding. If a subsidiary interest were to be purchased not only is there additional borrowing of \$3 million to take into account in the gearing calculation, but, much more significantly, PPS's own borrowings have to be included in long-term liabilities. PPS is highly geared and so the impact on consolidation is very substantial. If an associate interest were acquired PPS's borrowing would be kept off statement of financial position.



### Solution 30

### Report

Takeover targets: W, Y and Z

(a) The three potential targets are similar in size, each producing revenue at the level of approximately 10% of ABC's revenue. In respect of performance, Z appears superior to the others: its gross profit margin and operating profit margins are significantly higher than those of W and Y. Y's operating profit margin is disappointing at 4.7%; however, there may be scope to improve control over its operating expenses. Z's return on capital employed is also impressive, at almost double that of entity Y, and it is better than that of ABC itself. However, it is relevant to note that the income tax rate in Zeelandia is significantly higher than that of the other countries, and this effect offsets some of its advantages.

The level of gearing in ABC itself is negligible with debt constituting only around 5% of equity. Gearing is also at a low level in Y and Z, but entity W is relatively more highly geared (debt constitutes 45.6% of equity). However, after takeover ABC's management would be able to control the level of gearing and to repay any long-term debt if it was felt necessary to do so. The economic environments in which the entities operate are, apparently, rather different from each other. As well as the differences in income tax rates already noted, interest rates vary from 6% in Winlandia to 10% in Zeelandia.

Working capital management varies between the entities. For ABC, the turnover in days for inventories, receivables and payables all lie in the mid-40s. Receivables turnover across the four entities is broadly similar, but there are some significant differences in respect of inventories and payables. Entity W appears to hold inventories for much longer than the other entities, and there may be problems with slow-moving or obsolete items. Payables turnover, on the other hand, is relatively fast in entity W, but at 73 days entity Z takes a long time to meet its payables obligations. This may be as a result of poor management, or deliberate policy. ABC has a relatively comfortable current ratio of 1.4:1, but the comparable ratio in all three target entities is less impressive.

The P/E ratios of the three targets and of ABC itself lie within a fairly narrow band. W's P/E is the lowest at 12.6; this could indicate that the share is relatively undervalued, that the most recent earnings figure was better than expected and the share price has not yet been adjusted upwards to reflect this, or that the investment is perceived as relatively risky in the market.

On the basis of the preliminary analysis, entity Z appears superior to the others in several aspects of performance. However, a great deal of further analysis will be required before reaching a conclusion, and, as noted below, there are many limitations in the analysis.

(b) There are several general limitations to any inter-firm comparisons. These limitations become even more important where international comparisons are made. The limitations include the following:

Accounting Standards and policies: in this case, entity Y prepares its financial statements in accordance with Yolandian GAAP. This may be very different from the International Standards that the other entities comply with. Even where the same or similar standards are adopted there is often scope for considerable variation in the choice of policies. For example, an entity can choose between valuing property, plant and equipment at depreciated cost, or at valuation. The policy selected by management may have a significant effect on the financial statements and upon accounting ratios such as return on capital employed.

Accounting reference date: there is a gap of 9 months between the accounting reference date of entities Y and Z on the one hand, and the accounting reference date of ABC on the other hand. A great deal of change can take place in a period of several months, both within the economy as a whole and in the activities of a single entity. The figures of Y and Z are, relatively speaking, out of date, and the comparison may be at least partially invalidated because of this effect.

Size of entities: the three target entities are of similar size, and so comparison between them is likely to have some validity. However, ABC is approximately ten times the size of each of the targets. Its expenses, for example, may be subject to economies of scale.

Differences between activities: all of the four entities being compared have the same principal activity. However, it is rarely, if ever, the case that entities are engaged in precisely the same sphere of activity, and there may be relatively minor supplementary activities that distort their performance. For example, one entity may derive part of its income through the hire or leasing of equipment. It is important to examine the details of entities' activities carefully in order to be sure that they are comparable with those of other entities.

Single period comparisons: there is always a risk that the results of a single period are not representative of the underlying trends within the business. Therefore, it is better, wherever possible, to examine the performance and position at several different dates.

Special problems of international comparison: where entities in different countries are being compared, it is even more important to be cautious about the value of the comparisons and conclusions drawn. National economies often experience cycles of economic growth and decline. These cyclical differences may have a significant effect upon the performance of entities. The entities in this case are, apparently, subject to different tax regimes. Such differences may very well be important factors in making decisions about investment. The size and nature of the stock markets may well differ considerably between different regimes. In a small, illiquid market, for example, share prices may be generally lower, reflecting the lack of liquidity in the investment. Lower prices would, of course, affect the P/E ratio, which is regarded as important.