Examiners' General Comments

This was the second diet of the new syllabus. The performance at the first diet in May 2005 had been very disappointing and November 2005 does not show any improvement. Similar weaknesses were observed, with many candidates lacking knowledge of even quite basic financial calculations.

This was clearly demonstrated in question one where many could not carry out a simple T.E.R.P. calculation, or obtain forward exchange rates from interest rates. The grasp of basic concepts was also poor, with a lack of ability to distinguish between cash flow and profit figures or calculate a simple average investment figure as part of a calculation of an average accounting rate of return in Question 1 part (a).

Despite specific guidance in the Post Exam Guide after the May 2005 examination, some candidates still attempted the investment appraisal calculations in Question 1 without using a tabular format. This creates considerable confusion for candidate and marker alike and unnecessary loss of a mark for structure and presentation.

The most popular optional questions were Questions 4 and 5. Question 5 proved to be a good choice with the highest average mark of any question. Candidates were generally highly competent in producing forecast income statements and cash flow forecasts from balance sheet and other data. Question 4 was less successful, with most calculating ratios such as earnings per share without first adjusting the pre-interest and tax trading cash flows for basic items such as interest and tax. Answers to the second half of the question were also poor, with few demonstrating any depth of knowledge of factoring and many answers looking surprisingly similar to those for Question 3 (iii).

The least popular question was Question 3 which also had the lowest marks. In this question, candidates were required to de-gear and re-gear a beta and calculate a range of values for a given entity and there were some poor attempts at these calculations. In part (ii) of Question 3, many failed to provide much valid discussion of a bidding strategy. Some restricted their answers to calculations only, despite a high mark allocation of 13 marks indicating that more detailed analysis and discussion was expected.

The inability of candidates to apply knowledge to a given case scenario was highlighted, in particular, in Question 2. In part (b) of that question, they were required to look at financing strategies "in the context of the economic environment described" which included near zero inflation and low interest rates. However, there was barely a mention of these issues in many scripts.

We hope for great improvement in competence in handling financial calculations and in the ability to apply knowledge to a given case scenario in the May 2006 diet!

SECTION A

Question 1 (a)

Show, by calculation, that the proposed investment project in Bustan met the two minimum investment criteria set by GAS plc.

(18 marks)

Rationale

This question concerns an international energy entity. The organisation is based in the UK, but has operating subsidiaries throughout Europe. The organisation is looking to expand and has focused new investment in a large Asian country, which is in urgent need of major improvements in its energy generation and supply to support increases in industrial production there.

The question involves investment appraisal and discussion of the major risks to the energy entity of this new investment. It also examines concerns made by the Board of the energy entity about the unusually volatile movements in the entity's share price recently. The question requires candidates to explain the possible reasons for the movements, advise on a fair market share price following acceptance of the project proposal by the country, after adjusting for the proposed share issue, and the extent to which the Board of the energy entity is able to influence this price.

It further requires a calculation and discussion of the entity's share price based upon three different bases. Marks are available for structure and presentation of the answer. It examines topics in all four sections of the syllabus.

Suggested Approach

Criterion 1
Adjust Bustan cash flows for depreciation and loss on realisation of working capital to obtain profit figures

Calculate the accounting rate of return using these annual profit figures and an average investment figure calculated as 50% of the sum of the initial investment and residual value

Apply Bustan tax to the annual profit figures (as capital allowances are the same as depreciation)

Criterion 2
Adjust profit figures to obtain the net cash figure repatriated to the UK

Deduct UK tax and add back double tax relief

Include the initial and residual investment cash flows

Convert cash flows from Bustan $ to UK £ (at spot if using a discount factor adjusted for the difference in interest rates, otherwise at forward rates)

Apply the appropriate discount factor to obtain the NPV of the £ cash flows. The best approach was to adjust the discount factor by the interest rates, enabling years 5 to 9 to be aggregated and a single 5 year annuity factor to be applied to the aggregated cash flows in years 5 to 9

Marking Guide	Marks
Structure and presentation of the numbers in columnar format	1
Operating cash flows	1
Loss on realisation of working capital	1
Bustan tax	2
Annual accounting profit	1
Average profit	1
Average investment	1
ARR and comment	1
UK tax including double tax relief	3
Initial investment and residual value	2
Conversion $ to £, including adjusting discount factor	3
NPV and comment	1

Examiners' Comments

Most managed to pick up enough marks to earn half marks on this part of the question. Candidates usually made a good attempt at scheduling the cash flows and calculating the NPV.

The most worrying aspect was the difficulty candidates had in differentiating profit from cash flow, using profit figures to calculate the NPV and/or cash flow figures in the accounting rate of return. Many had problems with both the numerator and denominator of the ARR (see *Common Errors* below) **despite being provided with the formula in the question.**

The calculation of forward rates and conversion of $ to £ was also surprisingly poor. It was very common for interest rates to be applied the wrong way round, or for candidates to multiply, rather than divide, the Bustan $ cash flow figure by the relevant exchange rate.

Few spotted the significantly faster approach of adjusting the discount factor using the two interest rates provided. This eliminates the need to calculate forward exchange rates since the cash flows (or, quicker still, the final NPV figure) can be converted at spot. In addition, figures for years 5 to 9 are then identical and can be amalgamated.

Common Errors

Omitting the loss on realisation of working capital

Not adjusting for capital allowances when calculating Bustan tax

Using cash flow rather than profit figures in the numerator of the ARR calculation

Deducting rather than adding the residual value of the investment to the initial value when calculating average investment for the denominator of the ARR calculation

Timing problems with the UK tax calculation: applying a net 10% tax rate is only an approximation and this approach did not earn full credit

Omitting UK tax altogether or applying a 30% rate and ignoring the double tax treaty

Question 1 (b)

Discuss the major risk issues that should have been considered by GAS plc when evaluating the project.

(7 marks)

Rationale

Per 1 (a)

Suggested Approach

Discuss the reliability of the cost and revenue estimates that underlie the analysis

Highlight the importance of the residual value estimate to the positive NPV result and consider the numerous potential problems that might arise when attempting to sell on the plant and equipment

Consider the impact of a delay in the project

Discuss the impact of other factors such as:

Regulator/political interference such as changes to the favourable tax treatment or restrictions on repatriation of profits

Movements in exchange rates not as forecast

Marking Guide	Marks
Comments should be awarded up to 3 marks each depending on quality of discussion. Key points are as below but marks should be awarded for other valid comments not included in the list. Reliance of result on the key estimate of realisation of plant and equipment Other cost and revenue estimates and timings Risk of regulator/political interference Exchange rates/discount factor assumptions	Max 7

Examiners' Comments

There were some good answers to this question and usually some attempt to apply risk issues to the scenario provided.

Common Errors

Few picked up the key issue of the high dependency of the result on the estimated realisable value of the plant and equipment.

Many failed to even identify the reliability of cost and revenue estimates as a risk issue.

Question 1 (c)

The board of GAS plc has been concerned about the unusually volatile movements in the entity's share price in 2004 and 2005 and has asked you, an external management consultant, to draft a report to the board of GAS plc that critically addresses the issues detailed below. Assume a semi-strong efficient market applies.

(i) Explain the possible reasons for the unusually volatile movements in the entity's share price in the twelve months up to and including 1 January 2005. NO calculations are required.

(6 marks)

(ii) Advise what would have been a fair market price for GAS plc's shares in January 2005 following the announcement of the acceptance of the proposal and after adjusting for the proposed rights issue. As part of your answer, calculate GAS plc's share price on each of the bases listed below and discuss the relevance of each result in determining a fair market price for the entity's shares:

- the theoretical ex-rights price *before* adjusting for the project cash flows;
- the theoretical ex-rights price *after* adjusting for the project cash flows;
- directors' dividend forecast issued in January 2005.

(14 marks)

(iii) Advise on how and to what extent directors are able to influence their entity's share price.

(5 marks)

Within the overall mark allocation, up to 4 marks are available for structure and presentation.

Rationale

Per 1 (a)

Suggested Approach

Part (i)
Provide a brief summary of the efficient market hypothesis

Consider each price-sensitive event in turn and explain the likely impact of that event on GAS plc's share price

Emphasise the importance of shareholder expectations of the profitability and risks associated with the project on the share price

Explain the possible impact of general market and business conditions on the share price

Question 1 (c) (continued)

Suggested Approach

Part (ii)
Calculate T.E.R.P. *before* project cash flows

Calculate T.E.R.P. *after* project cash flow

Calculate share price using the dividend growth model and based on the directors' dividend forecast

Discuss and explain the results of the above analysis

Conclusion

Part (iii)
Explain the impact of information provided to the market by directors on the share price

Advise on the need for directors to give careful consideration to the release of accurate information to the market and not to mislead shareholders or other interested parties by announcing unrealistic dividend or earnings predictions

Structure and presentation
Use memorandum format for your answer

State purpose

Use a main heading and sub-headings

Summarise key comments in a conclusion

Marking Guide	**Marks**
Comments should be awarded up to 3 marks each depending on quality of discussion. Key points are as below but marks should be awarded for other valid comments not included in the list.	
Part (i)	Max 5
Efficient market hypothesis – explanation of semi-strong form Impact of changes in economic or business conditions on the share price Market perception of the likely outcome of the bid and profitability of the project Extent to which the information has been anticipated by the market	
Part (ii)	Max 13
Calculation of T.E.R.P. *before* project cash flows (max 3) Calculation of T.E.R.P. *after* project cash flows (max 2) Calculation based on directors' dividend forecast (max 3) Discussion of results/alternative calculations (max 6) Conclusion (max 2)	
Part (iii)	Max 4
Informing the market of developments Importance of accurate information/dividend predictions	
Structure and presentation in parts (c)(i) to (c)(iii)	Max 3

Question 1 (c) (continued)

Examiners' Comments

Parts (c) (i) and (c)(iii) were generally answered well. In some cases, more detail was provided than was warranted by the mark allocation.

The calculations in part (c) (ii) were less well handled (see *Common Errors* below) and the discussion tended to be limited to noting that one figure was higher. The figures had been deliberately chosen to ensure that the share price based on the director's revised dividend forecast was highly unrealistic in the light of the enhanced returns as a result of the new project, but very few raised this key issue.

Common Errors

Part (i)
No specific comments

Part (ii)
Inaccurate calculation of the T.E.R.P. *before* project cash flows. Errors included:

Using an investment value of $700 without first converting this into £
Converting the $700 initial investment value into £ by multiplying rather than dividing by the spot rate
Using an assumption or estimate rather than calculating the actual rights price
Basing calculation of numbers of shares on a nominal share value of £1 rather than 50p

Failing to adjust for the proceeds of the rights issues in the calculation of the T.E.R.P *after* project cash flows

Oversimplification of the dividend growth model valuation by assuming perpetual growth, ignoring the constant 14p dividend in the first 3 years

Little or no comment on the relative reliability of the market prices calculated

Part (iii)
Discussion of fraudulent and insider dealing activities used to influence the entity's share price without making it clear that this is illegal and undertaking such activities is not part of your advice!

SECTION B

Question 2 (a)

Evaluate the appropriateness of HG's current objectives and the Finance Director's suggestion, and discuss the issues that the HG Board should consider when determining the new corporate objectives. Conclude with a recommendation.

(15 Marks)

Rationale

Part (a) requires evaluation of the appropriateness of the current and proposed objectives of the entity described in the question. It also requires discussion of the issues arising and asks candidates to make a recommendation to the Board of the entity about these.

Suggested Approach

Provide a brief summary of the theoretical position

Note that the entity in the scenario is a private entity and does not have a quoted share price

Note the advantages and limitations of the entity's current objectives

Discuss the advantages and disadvantages of alternative objectives

Make a recommendation

Marking Guide **Marks**

Comments should be awarded up to 3 marks each depending on quality of discussion. Key points are as below, but marks should be awarded for other valid comments not included on the list.

Theory supports maximising shareholder wealth
Private company – no market value available
Dividend growth as sole objective has limitations
PAT and RoI – advantages and disadvantages (more than 3 marks available here for good discussion)
Broader objectives – advantages and disadvantages
Possible use of balanced scorecard
Recommendation and possible need for an unlisted entity to consult shareholders

Question 2 (a) (continued)

Examiners' Comments

Very few managed to provide more than a marginally satisfactory answer to this question. For many, this question appeared to be a "make weight" that was attempted when none of the other optional questions (which all required calculations) was possible. It was the second least popular of the optional questions.

Common Errors

No specific common errors for this part of the question. The main areas of weakness were providing vague and insubstantial discussion. Many did not conclude with valid recommendations, as required by the question.

Question 2 (b)

Discuss the factors that the treasury department should consider when determining financing, or re-financing, strategies in the context of the economic environment described in the scenario and explain how these might impact on the determination of corporate objectives.

(10 Marks)

Rationale

Part (b) requires discussion of the factors to be considered by the treasury department of the entity when determining financing, or re-financing, strategies in the context of the issues currently facing the entity.

Suggested Approach

Provide a short introduction noting the key points that are to be addressed in the answer

Note the theoretical position about debt being cheaper than equity and the reasons why this is so

Discuss the arguments as to why debt might become a burden in an economic environment as described in the scenario

Provide a conclusion

The key points to be discussed are shown below.

Question 2 (b) (continued)

Marking Guide

Comments should be awarded up to 3 marks each depending on quality of discussion. Key points are as below but marks should be awarded for other valid comments not included on the list.

Low inflation/no growth might mean cash generation in excess of investment opportunities
How to deal with surplus and impact on capital structure
Discussion of choices – equity v debt (more than 3 marks available here for good discussion)
Theoretical effect on value of firm
Refinancing options and rate of return required by shareholders
Possible effect of joining ECCA

Examiners' Comments

See comments in part (a)

Common Errors

No specific common errors for this part of the question. The main areas of weakness were in providing vague and insubstantial discussion. A common weakness was not relating the discussion of the factors to the determination of corporate objectives, as required by the question.

Question 3 (i)

Assume you are a Financial Manager with FS. Advise the directors of FS on

(i) The appropriate cost of capital to be used when valuing MT. Accompany your comments with a calculation of the cost of equity for MT.

(6 Marks)

Rationale

Part (i) requires candidates to advise the directors of the entity described in the question on the appropriate cost of capital to be used when valuing a potential takeover of a current client.

Suggested Approach

Calculate market value for FS

Calculate the beta of an ungeared firm

Calculate the beta of MT

Calculate required return on equity for MT

Provide brief comments on the appropriate cost of capital

Marking Guide	**Marks**
Market value for FS	0.5
Bu for FS	1.5
Bg for MT	1.5
Re for MT	0.5
Comments on appropriate cost of capital	2

Examiners' Note: Alternative, valid approaches would have gained credit

Examiners' Comments

This question was generally quite poorly attempted with many not realising the approach that was required.

Common Errors

Not calculating a market value for FS

Question 3 (ii)

Assume you are a Financial Manager with FS. Advise the directors of FS on

(ii) A bidding strategy; that is the initial price to be offered and the maximum FS should be prepared to offer for the shares in MT. Use whatever methods of valuation you think appropriate and accompany each with brief comments on their suitability in the circumstances here. In calculations of value that require a discount rate, use the cost of equity you have calculated in (i) above. Your answer should consider the interests of both groups of shareholders.

(13 Marks)

Rationale

Part (ii) requires candidates to advise on a bidding strategy, using whatever methods of valuation the candidates think appropriate, supported by comments on their suitability in the circumstances described.

Suggested Approach

Identify the key methods of valuation

Note asset values, recognising that these will be increased by retained earnings

Calculate market values using the bidding company's PE ratio

Comment on the need to do a cash flow evaluation

Calculate valuation using dividend valuation model

Provide comments as per the list below

Marking Guide	**Marks**
Identifying methods of valuation	1
Asset values:	1
+ for recognising retained earnings	1
Market value using P/E ratios	2
Commenting on/making adjustment	1
Comment on CAPM/cash flows	1
DVM-based method:	
Comment/calculation of growth	1
Values – range	3
Comments on bidding strategy key points are :	(max 6)
Agreed bid/ask for more information	
Probable 2-stage process	
Recognition of synergies and value	
Bank's involvement	
Relevance to corporate objectives	
Any valid attempt at a bid price	

Question 3 (ii) (continued)

Examiners' Comments

This part of the question was reasonably well attempted and most managed to provide some discussion of a range of valuation methods. A minority failed to recognise that MT was a private company and therefore did not have a share listing.

Common Errors

Showing net assets as total assets

Not recognising that the assets will be increased by retained earnings

Not providing a range of valuations depending on the different growth forecasts

Providing calculations but inadequate discussion

Question 3 (iii)

Assume you are a Financial Manager with FS. Advise the directors of FS on

(iii) The most appropriate form of consideration to use in the circumstances. Assume the choice is either a share exchange or cash. Your answer should consider the interests of both groups of shareholders.

(6 Marks)

Rationale

Part (iii) requires candidates to advise on the most appropriate form of consideration (either share exchange or cash) to use in the circumstances described with particular consideration of the interests of both groups of shareholders.

Suggested Approach

Discuss the key points if the bid is to be in cash, noting that insufficient cash is available at present

Discuss the advantages and disadvantages of a share exchange

Provide a recommendation

Question 3 (iii) (continued)

Marking Guide	**Marks**
Comments should be awarded up to 3 marks each depending on quality of discussion. Key points are as below, but marks should be awarded for other valid comments not included on the list.	
Cash: Cash available per Balance Sheet Effect of debt on gearing/EPS	
Shares: Calculation of an exchange rate Effect on gearing/cost of capital Would MT's shareholders accept shares Effect on bidder if they did accept shares but then sell Other factors (cost, control etc)	

Examiners' Comments

This part of the question was reasonably well attempted by well-prepared candidates, although many provided a standard discussion of share exchange versus cash without relating it to the scenario details.

Common Errors

Providing inadequate discussion.

Providing discussion, but not supported by any calculations.

Question 4 (a)

Calculate for the current situation and financing alternatives 1 and 2 the expected:

(i) earnings per share;

(ii) market value of equity, using the capitalisation of earnings at the cost of equity;

(iii) market value of the entity;

(iv) gearing ratios (debt to total value of the entity), using market values;

(v) weighted average cost of capital

State whatever assumptions you consider necessary.

(12 Marks)

Rationale

Part (a) requires calculation of various financial indicators, based upon three different bases, pertaining to the entity described in the question.

Suggested Approach

Calculate number of new shares to be issued by way of a rights issue and total number of shares in issue following the rights

For the current situation and each alternative, calculate:

- Earnings for equity
- Earnings per share
- Market value of equity
- Market value of the entity
- Gearing ratios
- Weighted average cost of capital

Marking Guide **Marks**

		Calculations	*Per alternative*	*Total*
Preliminaries:				
	Number of new shares/total shares			1.5
	Earnings for equity		0.5	1.5
	(i)	EPS	0.5	1.5
	(ii)	MV of equity	0.5	1.5
	(iii)	MV of entity	0.5	1.5
	(iv)	Gearing ratios	0.5	1.5
	(v)	WACC	1	3

Question 4 (a) (continued)

Examiners' Comments

This part of the question was not as well answered as might have been expected, as it required fairly straightforward calculations, although most managed to obtain marginally satisfactory marks

Common Errors

Not recognising that the dividend on preference shares does not attract tax relief

Not calculating earnings but using cash flow from trading before interest and tax

Calculating the market value of equity by multiplying the number of shares in issue by the share price. The question specifically asks for the market value to be calculated using the capitalisation of earnings at the cost of equity

Assuming the market value of the entity was the same as the market value of equity

Not calculating the cost of preference and cost of debt in the weighted average cost of capital calculations (that is using the coupon rates instead).

Question 4 (b)

Assume you are a Financial Manager with WZ. Advise directors of WZ of the issues to be considered before deciding on which type of finance to choose, including factoring, and make your own recommendation.

(13 Marks)

Rationale

Part (b) requires candidates to advise the directors of the entity of the issues to be considered before deciding which form of financing to choose to fund its expansion and asks candidates to make a recommendation to the directors about these.

Suggested Approach

Note which alternative maximises the value of equity and note the advantages and disadvantages of this alternative

Note the effect on dividends and gearing

Discuss the advantages and disadvantages of financing by factoring

Marking Guide

Comments should be awarded up to 3 marks each depending on quality of discussion. Key points are as below, but marks would have been awarded for other valid comments not included on the list below.

Advise which alternative maximises value of equity and EPS
Effect on required rate of return of shareholders
Effect on dividends – if any
Other suitable methods of finance
Factoring: pros and cons/suitability
Market and economic factors

Examiners' Comments

In this part of the question, most understood what was required and provided a satisfactory discussion.

Common Errors

Providing a general discussion of the advantages and disadvantages of debt versus equity without relating it to the specific circumstances of the question

Not providing any discussion, or inadequate discussion, on factoring.

Question 5 (i)

Required:

Assume you are a consultant working for RJ plc. Evaluate the implications of the financial information you have obtained. You should:

(i) Provide forecast income statements, dividends and retentions for the two years ending 31 December 2006 and 2007.

(6 Marks)

Rationale

This question requires evaluation of the implications of the financial information by the provision of forecast income statements, dividends and retentions and cash flow forecasts for the next two years based upon extracts of the income statement and balance sheet of the entity described in the question.

Suggested Approach

Provide the following calculations in an income statement layout for 2006 and 2007:

Revenue, costs and expenses

Depreciation

Operating profit

Finance costs

Tax

Earnings

Dividends declared

Retained earnings for the year

Marking Guide	**Marks**
For both years (2006 and 2007):	
Revenue, costs and expenses (including depreciation)	1.5
Finance costs	0.5
Correct handling of depreciation	0.5
Tax, including Capital Allowances up to	2.0
Earnings	0.5
Dividends	0.5
Retained earnings	0.5

Question 5 (i) (continued)

Examiners' Comments

This part of the question was generally well answered by those who attempted it. The main area of weakness was, as noted below, an inability to recognise the impact of capital allowances in the taxation figure.

Common Errors

Increasing costs and expenses by 10% instead of 5%

Ignoring depreciation

Not calculating the effect of capital allowances in the taxation figure

Not completing the statement by showing retained earnings

Question 5 (ii)

Required:

Assume you are a consultant working for RJ plc. Evaluate the implications of the financial information you have obtained. You should:

(ii) Provide cash flow forecasts for the years 2006 and 2007. Comment briefly on how RJ plc might finance any cash deficit.

(8 Marks)

Note: This is **not** an investment appraisal exercise; you may ignore the timing of cash flows **within** each year and you should not discount the cash flows. You should also ignore interest payable on any cash deficit.

Rationale

See part (i)

Question 5 (ii) (continued)

Suggested Approach

Provide a suitable cash flow forecast layout. Note that there is some flexibility in the method of presentation as the question asks for a cash flow forecast rather than a cash flow statement (which would need to be in published statement format).

Calculate the following

- Cash received
- Cash payable
- Cost of machinery
- Taxation payable in the year
- Dividends payable in the year
- Finance costs
- Net cash flow, opening and closing balances

Provide brief comments on the final closing balance

Marking Guide	**Marks**
Cash from sales	1.0
Purchases	1.0
Machinery	0.5
Taxation (recognising timing)	0.5
Dividends (recognising timing)	0.5
Finance costs	0.5
Net cash flow and opening and closing balances	2.0
Comments	2.0

Examiners' Comments

This part of the question was also generally well answered, although, in many cases, the presentation of the figures could have been improved.

Common Errors

Not showing opening and closing balances

Timing errors

Not providing any comments

Question 5 (iii)

Required:

Assume you are a consultant working for RJ plc. Evaluate the implications of the financial information you have obtained. You should:

(iii) Discuss the key aspects and implications of the financial information you have obtained in your answer to parts (i) and (ii) of the question, in particular whether RJ plc is likely to meet its stated objectives. Provide whatever calculations you think are appropriate to support your discussion. Up to 4 marks are available for calculations in this section of the question.

(11 Marks)

Rationale

Part (iii) of the question requires discussion of the key aspects and implications obtained from the financial information provided and, in particular, whether the entity is likely to meet its stated objectives. Marks are available for calculations.

Suggested Approach

Provide some supporting calculations, for example return on equity, earning per share increase

Discuss key points as shown in the list below

Marking Guide	**Marks**
Calculations – up to a maximum of Return on Equity EPS increase Market Value of company DPS increase	4
Key points Return on Equity Investment and financing Increase in earnings and dividends Effect on Market Value	7

Examiners' Comments

No specific comments.

Common Errors

Providing some discussion, but no supporting calculations