General Comments

This was the first diet of the new syllabus, although there are many similarities to the syllabus of the old paper 13. The performance in May was very poor. The change in syllabus might account for some of the decline, but not to the extent that was observed. Many candidates demonstrated a very weak grasp of basic techniques, such as the importance of market share price in a takeover bid, the approach to calculating forward exchange rates and the calculation of break even. Many candidates also continue to suggest retained earnings are cash, and/or that issuing bonus shares will result in a cash injection.

The very poor attempt at structure and presentation of some of the answers, especially of calculations, continues to give cause for concern. Many candidates, especially those in some overseas centres, were quite unable to present an investment appraisal in a format that was clear and understandable. All textbooks on the subject, including the *Study System*, show how an investment appraisal could be presented.

Question three was the most popular of the optional questions, both in home and overseas centres. Question five was also popular in home centres with questions two and four more or less the least popular (depending on centre). Question two was more popular in overseas than in home centres.

Where the marking scheme says *up to 3 marks are available for each valid point*, 0.5 marks are awarded for a bullet point, 1 mark for some attempt at (correct and valid) discussion, rising to 3 marks for good discussion of the point using appropriate illustrative examples. The published solutions are used as a guide. Marks are also awarded for candidates' own valid comments that might not be in the marking guide or the published solutions.

Where marks are shown for calculations, the mark shown is the maximum available assuming calculations are all correct. Marks are available for recognition of correct approach and understanding.

Note that in the marking scheme the sum of the marks available for specific activities may total more than the marks indicated on the question paper. This is to allow some flexibility in marking, but the maximum marks that can be awarded for a section of a question cannot exceed the number of marks indicated on the question paper.

SECTION A – 50 MARKS
READ THE SCENARIO AND ANSWER THIS QUESTION.

Question One(a)

(i) Calculate the maximum price that Groots would be prepared to pay for Cocomos based on the present value in euros of the forecast cash flows. Using appropriate discount rates, you should calculate present value using ***both*** the recognised methods of evaluating international investments.

(7 marks)

(ii) Comment briefly on why, in theory, these two methods should give the same answer and why, in practice, the answers might be different.

(3 marks)

(iii) Calculate the number of shares Groots might need to issue if it offers its own shares in exchange for Cocomos using the higher of the values for the company you have calculated in (i). Comment briefly on your calculations and/or assumptions.

(4 marks)

(Total for Part (a) = 14 Marks)

Rationale

This question concerns a retailer of clothing for women and children. The organisation is based in France, but has extensive trading interests throughout Europe. The company believes that it has exhausted possibilities for expansion within Europe and is therefore looking to expand in other continents. It has identified a small clothing group based in the Caribbean and is interested in opening discussions with respect to an agreed takeover.

The question involves investment appraisal and acquisition arithmetic. It also examines some of the non-financial issues that are raised by cross-border takeovers, particularly those that might be particularly relevant to a developing region. The question requires an evaluation of the value of the target company and a recommendation of the price to be paid.

It further requires an evaluation of possible methods of financing the bid, an analysis of strategies for enhancing the value of the combined company and advice on the benefits and limitations of post-completion audit.

It examines topics in all four sections of the syllabus.

Suggested Approach

Part (a)(i)

- Calculate forward exchange rates using interest rate parity.
- Inflate C$ cash flows at 4·5% compound each year (NB. Those candidates who did not inflate cash flows, but who correctly calculated a real discount rate and discounted the cash flows at that rate would have gained full credit).

For method 1:

- Convert C$ cash flows to euros using the exchange rates calculated and discount at 10%.
- Calculate NPV of the cash flows to year 4.

For method 2:

- Calculate an adjusted discount rate.
- Calculate discounted cash flows and NPV to year 4 at the adjusted or estimated rate.
- Convert C$ NPV to Euros at spot rate.
- Calculate value of cash flows for year 4 onwards under both methods.
- Deduct C$ value of Cocomos loan stock, converted at spot.
- Comment on the maximum price to be offered.

Part (a)(ii)

- Discuss the two basic approaches to evaluating international investments.
- Comment on why in theory they should be identical, but inefficiencies and imperfections in the market will create differences.
- Note the different risks applicable to international investments.

Part (a)(iii)

- Calculate the number of shares to be offered using the NPV calculated in part (a)(i) (or an estimated NPV if you were unable to complete the calculations).
- Calculate a share exchange ratio.

Marking Guide	**Marks**
Exchange rates	1.5
Inflated cash flows	1
Present values at 10% and adjusted rate	Up to 3
Price to pay	1.5
Comments on 2 methods	Up to 3
Number of shares to issue (on “own answer” NPV)	2
Comments	2

Examiner's Comments

This question was generally poorly attempted with many candidates being unable to provide the appropriate calculations and failing to provide adequate, or any comment, as required by the question.

Common Errors

Part (a)(i)

- Incorrect calculation of forward rates, either by using purchasing power parity instead of interest rate parity, or by showing the Caribbean $ appreciating against the Euro instead of depreciating. The relative interest and inflation rates in the two regions give a guide as to which direction the exchange rate should be taking.
- Failure to inflate cash flows or not compounding the rate each year (or using a *nominal* discount rate with *real* cash flows).
- Failure to use <u>two</u> methods and/or failure to calculate or estimate an adjusted discount rate for method 2.
- Failure to calculate cash flows for year 4 onwards.
- Deducting tax from cash flows which the question stated were post-tax.
- When taking the repayment of debt into account, adding this to the price to be paid rather than deducting it.
- Failure to provide any comments on the maximum price, as required by the question.

Part (a)(ii)

- Commenting on interest rate parity and purchasing power parity as the two methods of evaluating international investments.
- Commenting that any differences were due to rounding errors. A very small amount of credit was available for this comment, but it is not the real reason why there would be differences.
- Providing no answer at all to this part of the question.

Part (a)(iii)

- Calculating the total number of shares to be issued using the nominal value of the shares.
- Providing no comments on the calculations, as required by the question.

Question One(b)

Assume you are a financial manager with Groots. Write a report to the directors of Groots which should include the following:

(i) A recommendation of the maximum price to be offered to Cocomos. You should base your recommendation on the figures you calculated in part (a) and ***other*** suitable methods of company valuation.
(ii) Identify and discuss alternative methods of financing the acquisition and make a recommendation of the most appropriate method in the situation here.
(iii) An analysis of strategies for enhancing the value of the combined company following the acquisition.
(iv) Advice on the benefits and limitations of a post-completion audit and review in the context of the acquisition.

Use additional calculations to support your arguments, wherever relevant and appropriate, for which up to 10 marks are available. Marks are distributed roughly equally between sections of the report.

(Total for Part (b) = 36 Marks)
(Total for Question One = 50 Marks)

Rationale

See 1(a).

Suggested Approach

Provide a report heading, introduction, sub headings and conclusion.

Part (b)(i)
- Summarise the total company value and value per share of Cocomos using the various methods of company valuation.
- Discuss the relevance of the different methods to this particular takeover bid.
- Make a recommendation of the maximum price to be offered.

Part (b)(ii)
- Recognise that there are two basic methods of financing this bid: share exchange and cash.
- Discuss the situation if shares were to be offered (based on your answer to part (a)(iii)).
- Discuss the various methods available of raising cash if this is the chosen method (essentially this means either long term borrowing or a rights issue to existing shareholders of Groots).
- Calculate gearing ratios using both share exchange and borrowing and comment on the effect on these ratios of the two different methods.
- Comment on the different groups of stakeholders and their likely attitude to the different methods of funding.

Part (b)(iii)
- Advise on the strategies that might be available to Groots if the acquisition is completed.
- Discuss the various stakeholders' attitudes to the strategies that might be considered.

Part (b)(iv)

- Note the main purposes of a post completion audit.
- Note what the major requirements are of such an audit and that the objectives of the investment project must be clear and stated.
- Discuss the main advantages of a PCA/PCR.
- Discuss the main limitations of a PCA/PCR.

Marking Guide	**Marks**
Structure and presentation of report	2
Part (b)(i) Calculations and comments of the different methods of valuation up to a maximum of 10 marks (approximately 3-4 marks are available for calculations and 6-7 marks for comments	10
Part (b)(ii) Up to 3 marks are available, depending on quality of discussion for discussing the key points such as (but not limited to) : • Shares to be issued • Cash to be raised • Gearing calculations and comments • Price of new debt • Effect on WACC • Consideration of each group of shareholders • Recommendation	10
Part (b)(iii) Up to 3 marks are available, depending on quality of discussion for discussing the key points such as (but not limited to): • Need for integration of strategy • Synergy/economies of scale • Staff savings • Franchising each contract • Marketing strategy • Diversification/cost of capital • Sale of non-core/redundant assets • Risks of acquisition	10
Part (b)(iv) Up to 3 marks are available, depending on quality of discussion for discussing the key points such as (but not limited to): • Main purposes of PCA • Need for objectives • Main advantages Generating information; lessons for decision making; better project planning • Limitations Cost and time; still needs managerial judgement	10

Although up to 10 marks were available for discussion within each sub-section of the question, the overall maximum available for this part of the question, including structure and presentation marks, was 36 marks.

Examiner's Comments

Most candidates managed to provide a reasonable discussion of the benefits and limitations of post-completion audit. They were also usually able to attempt to identify and discuss alternative methods of financing, although many of these methods were not entirely appropriate for the situation here. The attempt at answering parts i and iii of this section of the question were very poorly done and, frequently, no attempt at all was made to analyse the strategies for enhancing the value of the combined company.

Common Errors

Part (b)(i)

- Providing no or very limited discussion of the various methods of valuing the company.
- Failing to recognise the importance of market values in a takeover bid situation.
- Incorrect calculation of net asset value.
- When calculating value using Cocomos PE basis of $10·3, failing to recognise they were simply calculating the market value.

Part (b)(ii)

- Suggesting that retained earnings could be used to finance the acquisition.
- Suggesting inappropriate methods in the circumstances, for example a venture capital company.
- Providing no calculations to support a recommendation to finance with debt. For example, the effect on gearing and the possible effect on cost of capital.
- Not recognising that both companies are listed companies.
- Suggesting factoring or sale and leaseback as methods of finance - methods which are quite inappropriate in the situation here.

Part (b)(iii)

- No specific common errors but this part of the question was frequently poorly answered or not attempted at all.

Part (b)(iv)

- Not recognising that this was a takeover situation.
- Suggesting that the post completion results should be conveyed to shareholders, this is highly unlikely.

SECTION B – 50 MARKS
ANSWER TWO ONLY OF THE FOUR QUESTIONS

Question Two(a)

Write a memorandum to the Board of XTA plc to explain the advantages and disadvantages of using each of the following sources of finance:

- a rights issue versus a placing (assuming UK equity finance is chosen to fund the new German subsidiary); and
- A euro bank loan versus a euro-denominated Eurobond (assuming euro borrowings are chosen).

(8 Marks)

Rationale

This question relates to a new part of the syllabus on financial management and goes beyond what would have been examined in the Finance paper on the previous syllabus as it looks at the appropriate currency of funding as well as the choice between debt and equity funding. The modelling of balance sheets based on movements in exchange rates is, I believe, new to students, and involves knowing that exchange differences on translation are posted to either profit and loss or reserves. The numbers have been kept deliberately very straightforward.

Suggested Approach

- Use memorandum format.
- Explain the advantages and then the disadvantages of a rights issue versus a placing.
- Explain the advantages and then the disadvantages of a euro bank loan versus a euro-denominated Eurobond.

Marking Guide	**Marks**
Advantages of rights versus placement	4
Advantages of bank loan versus Eurobond	4

Examiner's Comments

Candidates who had learnt the key features of the four sources of finance referred to in the question generally earned high marks in this section.

There was a wide disparity of marks awarded in part (b) with many candidates unable to adjust the balance sheet to reflect the new investment and different financing alternatives.

Common Errors

- Comparing a share issue to debt or euro debt to sterling debt, neither of which was required.
- Misunderstanding of the nature of a placing, incorrectly claiming that it is more expensive than a rights issue and requires underwriting whereas a rights issue does not.
- Incorrect interpretation of a euro bank loan as a bank loan sourced in euro land rather than a loan denominated in euros.

Question Two(b)

Evaluate EACH of the alternative proposals of Messrs A, B and C for financing the new German subsidiary and recommend the most appropriate form of financing for the group. Support your discussion of each proposal with

- a summary forecast consolidated balance sheet for the XTA group at 31 December 2005 incorporating the new investment; and
- calculations of gearing using book values

Using year end exchange rates of ***both*** £1 = €1·50 and £1 = €2·00.

(17 Marks)
(Total for Question Two = 25 Marks)

Rationale

See 2(a).

Suggested Approach

- Produce summary group balance sheets under each alternative financing proposal of Messrs A, B and C at the two outturn exchange rates provided and calculate gearing for each scenario.
- Compare the extent of currency exposure and gearing levels across all three alternative financing structures.

Marking Guide	**Marks**
Revised balance sheets (3 marks per board member's proposal)	9
Gearing calculations	3
Evaluation of board members' suggestions (2 per proposal)	6
Recommendation	2

Note: maximum of 17 marks out of 20 available for whole of part (b)

Examiner's Comments

See 2(a).

Common Errors

- The balance sheet was frequently only presented at one of the two exchange rates specified in the question.
- There was a widespread misconception that a sterling loan would eliminate exchange rate risk.

Question 3(a)

Construct the balance sheet, income statement and a cash flow analysis of the company for each of the years 2005 and 2006 and advise the company on the extent of any additional funding requirement in that period. In your answer, round figures to the nearest £100,000.

(16 Marks)

Rationale

Part (a) requires the modelling of future financial statements and cash flows and is adapted from a number of past Financial Strategy questions on the previous syllabus.

Suggested Approach

Adopt a structured approach by:

- laying out the proforma balance sheet, income statement and cash flow analysis
- inserting numbers from the base data
- providing clear workings when calculating supplementary figures such as fixed asset movements and tax payments

Marking Guide	**Marks**
Calculation of taxes	3
Calculation for non-current assets	2
Revised income statement	4
Revised balance sheet	2
Cash flow analysis	5
Advice on additional funding requirement	2

Note: Maximum 16 marks out of 18 available for part (a)

Examiner's Comments

Candidates who attempted this question generally answered satisfactorily. Most were able to produce the required financial statements and make an attempt at the more complex calculations of cash flows and tax. Answers to part (b) were less satisfactory, with many generalised comments on financing, investment and dividend decisions and little tailoring of answers to the specific circumstances of the question.

Common Errors

- Incorrect calculation of the cash flows and tax, with the depreciation adjustments being most commonly overlooked.
- Ignoring the requirement stated in the question to give advice on the extent of any additional funding required in the period.

Question Three(b)

Discuss the interrelationships between financing, investment and dividend strategies with reference to the liquidity requirements of GSD Ltd. Include in your discussion how each could be adapted to meet the company's liquidity requirements in the years 2005 and 2006 and provide a recommendation.

(9 Marks)
(Total for Question Three = 25 Marks)

Rationale

Part (b) tests understanding and application of the results based on principles previously examined in the Finance paper on the previous syllabus, but are tested with a stronger emphasis on application as is appropriate at Strategic Level.

Suggested Approach

Concentrate on:

- the *interrelationship* of the financing, investment and dividend strategies.
- *how each could be adapted* to meet GSD Ltd's liquidity requirements in the years 2005 and 2006, including a brief glance into cash flow prospects in 2007 in order to assess how long the cash shortage is likely to exist.

Marking Guide	**Marks**
Inter-relationship of investment/financing/dividends: discussion of key points, such as: • Inter-dependence of the three strategies • Forecast liquidity requirement for 2007 onwards • Increase the bank loan • Reduce or delay capital expenditure • Reduce dividend, especially noting circumstances of GSD	7
Recommendation	2

Examiner's Comments

See three (a).

Common Errors

- Ignoring the important fact that GSD Ltd is a private company. For example, lengthy discussion on issues such as dividend signalling are irrelevant and shareholders cannot readily sell shares to raise funds in the event of a cut in dividend levels.

Question Four(a)

Calculate:

(i) the compound annualised post-tax cost of debt;
(ii) the NPV of the lease versus purchase decision at discount rates of both 4% and 5%;
(iii) The breakeven post-tax cost of debt at which FLG Inc is indifferent between leasing and purchasing the aeroplanes.

(10 Marks)

Rationale

This is a standard lease versus buy comparison, a standard approach tested on a number of occasions in past Financial Strategy questions on the previous syllabus. The individual twist here is the need to calculate the cost of debt (as frequently examined in the Finance paper on the previous syllabus).

Suggested Approach

Follow the guidelines given in the question closely:

- First, calculate the post-tax cost of debt for use later on in comparing to the IRR calculated in part (iii).
- Second, calculate the NPV of the lease versus purchase decision using both 4% and 5% rates (part (ii).
- Third, use interpolation to calculate the breakeven cost of debt (part (iii).

Marking Guide	**Marks**
Annualised post-tax cost of debt	2
NPV appraisal of lease versus buy	6
Breakeven calculation	2

Examiner's Comments

Answers to Question four were generally quite poor.

Common Errors

- Few candidates could calculate the compound annual interest rate required in part (i).
- Many ignored the tax on the lease payments.
- Interest and loan principal cash flows were frequently erroneously included in the DCF calculations.
- Residual value was often misstated as that for a single plane.
- Many candidates omitted the impact of residual value in capital allowance computations.

Question four(b)

Recommend, with reasons, whether FLG Inc should purchase with a loan or lease the aeroplanes.

Your answer should include appropriate calculations of the sensitivity of the lease versus purchase decision to changes in EACH of the following:

- the reference $ inter-bank rate for the duration of the loan;
- The residual value of the aeroplanes.

(15 Marks)
(Total for Question Four = 25 Marks)

Rationale

Part (b) tests sensitivity of the result to changes in residual value and interest rates which has not been examined before based on these variables.

Suggested Approach

- To examine the impact of interest rate movements, compare the breakeven rate calculated in part (a)(iii) with the present cost of debt calculated in part (a)(i) to assess how far interest rates could move before the lease/purchase conclusion is reversed.
- For changes in residual value, calculate the NPV of the residual value cash flows (standard decision making procedure) and compare to the NPV of the lease/purchase decision at the current cost of debt.

Marking Guide	**Marks**

Other factors to consider, such as:
• Sensitivity to interest rate changes
  o calculation (max 3 marks)
  o discussion (max 3 marks)
• Sensitivity to changes in residual value
  o calculation (max 3 marks)
  o discussion (max 3 marks)
• Quality/upgrade terms offered under lease
• Flexibility/plans at the end of 5 years
	13

Recommendation	2

Examiner's Comments

See four (a).

Common Errors

- Most candidates simply repeated the question, stating that potential changes to both interest rates and residual value were important to consider. There was little quantitative or qualitative analysis of these or other relevant issues.

Question five(a)

Evaluate the number of student enrolments required on the ITC course in order for it to be financially beneficial, on a net present value of cash flow basis, for the college to replace the ITS course with the ITC course.

(15 Marks)

Rationale

Part (a) tests standard investment appraisal using discounted cash flow. A new angle here is the calculation of a breakeven student enrolment figure.

Suggested Approach

- The most straight-forward approach involved the use of some very basic algebra, with "X" being the number of students above 150. Standard discounted cash flow analysis could then be performed on incremental cash flows and the value of "X" determined where NPV(cash flows) = 0.
- The same result could be achieved on a contribution basis rather than using algebra.
- Alternatively, a number of computations could be undertaken with different student numbers and the IRR estimated by interpolation.

Whichever approach was adopted, a separate adjusted calculation was required for student numbers in excess of 200 which should have included the cost of an additional part-time member of staff.

Marking Guide	**Marks**
Calculations for NPV of:	
Revenues	3
Costs	5
Use of correct discount factor and timings	1
Calculations assuming students >150 and N > 50	2
Conclusions/comments	4

Examiner's Comments

Candidates who could correctly identify and ignore sunk costs and schedule the cash flows in the correct timeframes generally performed reasonably well in this question, whichever approach they adopted.

There were also some good answers to part (b), especially where candidates recognised the relevance of real options in part (ii).

Common Errors
A large number of candidates made basic errors by:

- including sunk costs;
- ignoring the knock-on benefit from students taking other courses;
- misallocating cash flows to timeframes.

Question five(b)

Advise the governing body of the college on the following issues:

(i) How to monitor and control the costs and revenues of the project from the decision to introduce the new course to the start date of the course;

(5 Marks)

(ii) Options available if only 150 students enrol on the new ITC course by the enrolment deadline two weeks before the beginning of the course by which time all other course preparations will have been completed.

(5 Marks)
(Total for Question Five = 25 Marks)

Rationale

Part (b) is based on a new topic in the syllabus relating to project control and implementation.

Suggested Approach

In part (i), standard budgeting and control procedures were expected, adapted to the particular circumstances of the question.

Answers to part (ii) were expected to focus on the real options available to CTC in the light of under enrolment on the course. In particular, candidates were expected to re-evaluate the breakeven student number at this later point in time when additional costs such as course development expenses had already been incurred and should now be classified as sunk costs.

Marking Guide	**Marks**
Effective monitoring and control; up to 3 marks are available for each valid point, such as:	
• clear reporting line/responsibility allocated	
* regular reviews/monitoring costs against budget (incl investigation of overruns & feedback into revised budget)	
* fixing costs and revenues in advance where possible	
Alternative options available, up to 3 marks are available for each valid point, such as:	
• carry on or abandon (and implications of each, for example, damage to the reputation of the college)	
* implications of sunk costs/revised breakeven number	5

Examiner's Comments

See five (a).

Common Errors

- There were several instances where answers did not address the question set. In addition, few candidates attempted to re-evaluate the breakeven number of students or even highlight the usefulness of such analysis.