

Examination Paper, Solutions and Examiner's Report

**Paper:
Certificate in International
Treasury Management**

October 2011

- 1 In the short term, a company that is overtrading would be best advised to increase its:
- (a) overdraft
 - (b) sales
 - (c) profits
 - (d) long term investments

- 2 ABC forecasts the following balances at the start and end of an accounting period:

	start	end
Trade receivables	100	120
Raw material inventory	20	25
Work in progress inventory	40	10
Finished goods inventory	50	100
Trade payables	10	100

The change in working capital (excluding cash) over the forecast period is:

- (a) 145 increase
 - (b) 95 increase
 - (c) 85 increase
 - (d) 45 increase
 - (e) 45 decrease
 - (f) 135 decrease
- 3 A UK corporate currently allows domestic customers 90 days credit and a 3% discount for payment within 30 days. The best estimate of the equivalent nominal % cost of funds is:
- (a) 37.6%
 - (b) 36.5%
 - (c) 18.8%
 - (d) 18.3%
 - (e) 3.0%
- 4 A 91 day USD certificate of deposit is quoted at 6%. Which of the following statements is most accurate?
- (a) The effective annual rate is 6.08%
 - (b) The effective annual rate is 6.22%
 - (c) The nominal discount rate is 6.08%
 - (d) The nominal discount rate is 6.22%

- 5 A USD 50 million US certificate of deposit with a maturity of 60 days is quoted at 4%. For this instrument, it is true that:
- (a) the 60 days periodic rate is 0.657%
 - (b) the EAR is 4.011%
 - (c) the redemption value is USD 50 million
 - (d) the nominal yield is 4%
- 6 A 120 day certificate of deposit has a market yield on issue of 7%. GBP 1,000,000 is bought on issue and sold 50 days later for GBP 1,005,000. The best estimate of the nominal holding period yield is:
- (a) 0.50%
 - (b) 3.65%
 - (c) 5.00%
 - (d) 7.00%
 - (e) 16.50%
- 7 A GBP instrument maturing in 180 days is quoted at a discount rate of 6.00%. What is the best estimate of the EAR of this instrument?
- (a) 6.28%
 - (b) 6.19%
 - (c) 6.09%
 - (d) 6.01%
- 8 A farm is to be leased to a farmer in perpetuity. Annual rent is payable, with the first payment of 100 at the start of the first year. Rents increase annually with inflation, which is 2% per annum. The required rate of return to the owner of the farm is 5%. What is the best estimate of the present value of the rent payments?
- (a) 3,333
 - (b) 3,400
 - (c) 3,433
 - (d) 3,500
- 9 A par rate is:
- (a) a type of swap rate
 - (b) the rate at which a single future cash flow should be discounted
 - (c) today's expectations of future short term rates

10 Current market interest rates on two different bases are shown below:

Years	Heading A	Heading B
1	4.00%	4.00%
2	5.00%	5.02%
3	6.00%	6.08%

The missing heading labels are most likely to be:

	Heading A	Heading B
(a)	zero	par
(b)	par	zero
(c)	forward	zero
(d)	forward	par

11 A broker's screen quotes LIBOR less 10 basis points for overnight money to a corporate depositor. Here, 'LIBOR less 10 basis points' is best described as:

- (a) an official rate
- (b) an interbank rate
- (c) a reference rate
- (d) a market rate

12 A corporate pays 8% interest on debit balances on a GBP account. The account has the following transactions:

Ledger date	Value date	Dr	Cr	Cleared balance
20.12.10	21.12.10			10,000 Dr
31.12.11	31.12.10	9,000		19,000 Dr
06.01.11	8.1.11		19,000	0 Dr
03.02.11	5.2.11	25,000		25,000 Dr

The best estimate of the interest due for the period 1 January to 1 February is:

- (a) 33
- (b) 29
- (c) 25
- (d) 21

- 13 The US based CHIPS clearing system:
- (a) requires transactions to be initiated at least one day in advance
 - (b) is a real time gross settlement system
 - (c) has low intra-day transaction limits
 - (d) only provides next day finality
- 14 AB Inc has an expected funding need of 20 million throughout the next year. It can finance this using either a revolving credit facility (RCF) or an overdraft:
- Overdraft: facility 25 million at LIBOR + 1%
RCF: facility 25 million at LIBOR + 0.5%, annual commitment fee 0.2%
- LIBOR is currently 3.5%. Which is cheaper?
- (a) Overdraft is cheaper by 110,000
 - (b) Overdraft is cheaper by 90,000
 - (c) Overdraft is cheaper by 60,000
 - (d) RCF is cheaper by 110,000
 - (e) RCF is cheaper by 90,000
 - (f) RCF is cheaper by 60,000
- 15 A GBP 10 million 4.42% certificate of deposit (CD) is issued with a life of 182 days. 30 days after issue the CD is sold at a yield of 4.64%. What is the best estimate of how much the CD sold for?
- (a) 10,000,000
 - (b) 10,027,000
 - (c) 10,037,000
 - (d) 10,181,000
 - (e) 10,220,000
- 16 USCP with a face value of USD 10 million is issued for 183 days at a discount of 5.1%. What is the best approximation to the issue proceeds in USD?
- (a) 9.74 million
 - (b) 9.75 million
 - (c) 10.00 million
 - (d) 10.25 million
 - (e) 10.26 million

- 17 A corporate issues EUR 10 million face value of commercial paper (CP) with a life of 60 days. Issue proceeds are EUR 9.91 million. The CP has a % nominal yield of:
- (a) 5.40
 - (b) 5.45
 - (c) 5.48
 - (d) 5.50
 - (e) 5.52

- 18 Current market spot rates are:

USD/CHF 1.4570-90

USD/AUD 1.7920-30

What is the best estimate of the AUD cost to a corporate of CHF 1,000,000 at spot?

- (a) 2,612,000
- (b) 1,231,000
- (c) 1,228,000
- (d) 814,000
- (e) 813,000

- 19 USD/CHF market rates:

Spot	1 month
1.3990 - 10	25 - 28

What is the outright one month forward rate at which a corporate can contract to sell CHF?

- (a) 1.4038
- (b) 1.4015
- (c) 1.3982
- (d) 1.3965
- (e) 1.3938
- (f) 1.3882

- 20 It is Monday 28 April. Under the end/end rule, what is the 3 month forward value date for GBP/USD?

- (a) Tuesday 28 July
- (b) Wednesday 29 July
- (c) Thursday 30 July
- (d) Friday 31 July
- (e) Monday 3 August

21 A corporate wishes to sell AUD for CHF in 3 months'. Rates are:

	Spot	3 months
USD/CHF	1.4580 – 90	140 – 135
USD/AUD	1.7920 – 30	70 – 80

What is the best estimate of the CHF/AUD rate in 3 months' time that the corporate could fix today?

- (a) 1.2472
 - (b) 1.2468
 - (c) 1.2465
 - (d) 1.2461
 - (e) 1.2452
 - (f) 1.2361
- 22 An option dated forward provides an option on the:
- (a) underlying spot rate
 - (b) forward rate
 - (c) start date
 - (d) delivery date
- 23 What is the implied 90 day forward rate if the current spot rate is GBP/USD 1.4480 and 90 day interest rates are quoted as 2% in USD and 2.4% in GBP?
- (a) 1.4423
 - (b) 1.4467
 - (c) 1.4493
 - (d) 1.4537
- 24 Hybrid clearing and settlement systems:
- (a) settle on a gross basis
 - (b) settle once a day
 - (c) require more collateral than a RTGS system
 - (d) provide intra-day finality
 - (e) include CHATS in Hong Kong

- 25 SWIFT is best described as a:
- (a) payment system
 - (b) clearing system
 - (c) settlement system
 - (d) data exchange system
- 26 Cross-border payment flows using a correspondent bank:
- (a) achieve same-day value payments
 - (b) guarantee timely availability of funds
 - (c) involve at least two banks
 - (d) avoid double charging
- 27 The introduction of the euro increased the demand for which type of pooling:
- (a) single currency, one country
 - (b) single currency, cross border
 - (c) multi-currency, one country
 - (d) multi-currency, cross border
- 28 The time at which a company will first have access to funds that have been deposited at the bank is best described as:
- (a) availability date
 - (b) finality date
 - (c) value date
 - (d) float
- 29 A tracker fund:
- (a) will have higher costs than other managed funds
 - (b) is used to track superior fund managers
 - (c) will make changes in its portfolio over time
- 30 A large company may decide to list on a public equity market to:
- (a) reduce disclosure requirements
 - (b) improve its credibility
 - (c) give management greater control
 - (d) reduce pressures to deliver short term results

31 Pre-emption rights are the right of existing shareholders:

- (a) to dispose of their shares to the company
- (b) to buy newly issued shares in proportion to their existing holding
- (c) to receive free shares in proportion to their existing holding
- (d) to buy newly issued shares previously placed with institutions

32 A placing of shares:

- (a) is usually priced at a deep discount
- (b) is always for cash
- (c) will NOT affect the gearing of the company making the placing
- (d) may trigger a 'clawback' right

33 Company AB has 30 million shares in issue. Each share is worth \$5. AB wants to use a rights issue at a discount of 40% to the current share price to raise \$12 million. Ignoring costs, the rights issue should be structured as:

- (a) 1 for 5
- (b) 2 for 15
- (c) 2 for 25
- (d) 4 for 5

34 Real security for a loan can be given using:

	land	intangible assets	parental guarantees
(a)	yes	yes	yes
(b)	yes	yes	no
(c)	yes	no	no
(d)	no	no	no

35 A bond carries a coupon rate greater than its current yield to maturity, and is to be redeemed at par on maturity. The bond's market value:

	will be higher than its face value	will rise over the bond's life
(a)	yes	yes
(b)	yes	no
(c)	no	yes
(d)	no	no

- 36 A 10 year 5% fixed annual coupon bond was issued 4 years ago and will be redeemed at par. If the current market yield is 4%, the best estimate of its market price per £100 nominal ex interest is:
- (a) £80
 - (b) £100
 - (c) £104
 - (d) £105
 - (e) £108
- 37 A corporate facility specifies that the margin on the borrowing will change if the company's credit rating changes. This mechanism is called a:
- (a) pricing grid
 - (b) stepped margin
 - (c) margin link
 - (d) re-margin
- 38 What is the main advantage of an revolving credit facility (RCF) over a term loan, all else being equal? An RCF:
- (a) usually does not incur bank arrangement fees
 - (b) has no fixed maturity
 - (c) is more flexible
 - (d) usually carries a lower interest rate
- 39 A company has a borrowing with financial covenants. If the accounting standards change and this affects these covenants, what is most likely to happen? The financial covenants will be:
- (a) renegotiated
 - (b) no longer applicable
 - (c) tested under the old accounting standards
 - (d) tested under the new accounting standards
 - (e) tested under both old and new accounting standards
- 40 A bank is concerned that a potential borrower's position may deteriorate very rapidly between reporting dates. To protect its position in this situation, it is most likely to insist on:
- (a) strict financial covenants
 - (b) a change of control clause
 - (c) a material adverse change clause
 - (d) shares in the company

41 A corporate has a bank loan of 10 million, with 5 years to run, and annual interest of 3% due in one week. If the bank accelerates the loan, the best estimate of the amount the bank can legally demand under the loan, and the earliest it can do so, is:

	immediately	in 1 week
(a)	10 million	nil
(b)	10 million	300,000
(c)	10 million	1.5 million
(d)	10.3 million	nil

42 All other things being equal, a lower rated bond will have a:

- (a) higher issue price
- (b) lower coupon
- (c) low or zero premium on redemption
- (d) higher yield to redemption

43 An S&P rating of BBB is:

- (a) more creditworthy than an S&P rating of BBB+
- (b) more creditworthy than an S&P rating of BB+
- (c) the least creditworthy investment grade
- (d) a speculative grade investment

44 Under thin capitalisation rules, it is most likely that:

- (a) a local company must have a minimum level of debt
- (b) a local company must have a maximum level of equity
- (c) excess dividends over a set limit are not allowed
- (d) interest on excess borrowings will be treated as dividends

45 A small company with a foreign parent company is part of a large international group. It is choosing between borrowing via its parent company or locally. Borrowing locally is likely:

	To be cheaper than borrowing from their foreign parent	To be subject to withholding tax
(a)	Yes	Yes
(b)	Yes	No
(c)	No	Yes
(d)	No	No

46 An overseas customer buys a large piece of equipment. On delivery, despite the equipment being in good order and as specified, the customer refuses to accept the equipment or make payment. Which of the following would have protected the exporter from this credit risk?

- (a) A letter of credit
- (b) A documentary collection
- (c) A letter of comfort
- (d) A forward contract

47 Under Islamic finance principles, which of the following is acceptable?

	Commercial speculation	Interest	Sharing risk and return
(a)	Yes	Yes	Yes
(b)	Yes	Yes	No
(c)	Yes	No	Yes
(d)	No	Yes	Yes
(e)	No	Yes	No
(f)	No	No	Yes

48 Under a finance lease:

- (a) there will always be more restrictions than an operating lease
- (b) the legal ownership remains with the lessor
- (c) the risks of ownership remain with the lessor
- (d) the lessee allows the lessor to use the asset

49 In the statement of financial position for a company, total equity is equal to:

- (a) non-current assets less long term liabilities
- (b) total assets less total liabilities
- (c) total assets less current liabilities
- (d) current assets less current liabilities

50 Consolidated accounts are the financial statements for:

- (a) a sole trader
- (b) a partnership
- (c) a group
- (d) a company

51 A company has an operating profit margin of 5% and asset turnover of 1.20. Its ROCE is:

- (a) 2.4%
- (b) 3.8%
- (c) 4.2%
- (d) 6.0%
- (e) 6.2%
- (f) 24.0%

52 The calculation of the accounting ratio Return on Equity uses:

- (a) the market value of equity
- (b) profit before interest
- (c) the book value of equity
- (d) dividends and the increase in the share price

53 If the leverage ratio (debt to debt + equity) is 60% then the gearing ratio (debt to equity) is:

- (a) 40%
- (b) 60%
- (c) 67%
- (d) 150%

54 A company has:

inventory	120
receivables	60
cash	30
current liabilities	100

What are the current and quick ratios?

	Current ratio	Quick ratio
(a)	2.1	0.9
(b)	2.1	1.8
(c)	1.8	0.6
(d)	1.8	2.1
(e)	0.9	2.1

- 55 The financial risk to the sponsor of a defined benefit pension plan primarily relates to their requirement:
- (a) to make up any current or future pension deficit
 - (b) to include new employees in the scheme
 - (c) to close the scheme if it becomes illegal
 - (d) to make transfer value payments to employees leaving the scheme

- 56 A company has a variable rate loan and is planning to fix the interest payments with a derivative. If it wants to apply hedge accounting under IAS 39 to the derivative, which IAS 39 category would be most appropriate?
- (a) Cash flow hedge
 - (b) Fair value hedge
 - (c) Derivative hedge
 - (d) Net investment hedge

- 57 A project proposal is being considered on 1 April, and consists of:

	millions
Research (already spent)	0.5
Cash payment on equipment now	3.0
Cash receipt on scrapping equipment after 5 years	0.5
Net operating cash inflow at the end of each of years 1 to 5	1.0

The equipment is to be depreciated straight line over the 5 years.
The cost of capital is 10%, giving.

$$\text{DF (5 years, 10\%)} = 0.6209$$
$$\text{AF (5 years, 10\%)} = 3.7908$$

Ignoring taxation, the decision to undertake the project on 1 April would generate an NPV of:

- (a) 1.1 million positive
- (b) 1.1 million negative
- (c) 0.8 million positive
- (d) 0.8 million negative
- (e) 0.6 million positive
- (f) 0.5 million negative

58 A project has an up-front investment followed by positive cash flows.

- Required return on capital invested in the project: 7%.
- Project IRR: 6%.

On the basis of this information:

- (a) it is not possible to say whether the NPV will be positive or negative
- (b) the IRR calculation is based on a reinvestment rate of 7%.
- (c) the project should be rejected

59 The price/earnings ratio (P/E) is likely to increase when:

	Perception of risk	Expected growth
(a)	increases	improves
(b)	increases	deteriorates
(c)	decreases	improves
(d)	decreases	deteriorates

60 Two companies, X and Y, have:

	X	Y
post-tax profits	7 million	5 million
value	84.7 million	?

Y is generally regarded as more risky than X, but has similar growth prospects. Based on an initial P/E ratio approach, Y is most likely to be valued at:

- (a) less than 60.5 million
- (b) 60.5 million
- (c) between 60.5 million and 84.7 million
- (d) more than 84.7 million

61 For most companies, as gearing increases from zero the weighted average cost of capital will:

- (a) increase indefinitely
- (b) stay the same
- (c) decrease indefinitely
- (d) decrease to a certain point and then rise again

62 A company with no debt has a cost of equity of 10%. The company then:

- issues 5 million of debt at a cost of debt of 4.5%, and
- pays a special dividend of 5 million.

Following these actions, the market value of its equity becomes 20 million. Under Modigliani & Miller's theory without tax, the cost of equity is:

- (a) 4.5%
- (b) 8.9%
- (c) 10.0%
- (d) 11.4%

63 'Signalling' in the context of dividends means information flows:

	from:	to:
(a)	managers	shareholders
(b)	shareholders	managers
(c)	bondholders	shareholders
(d)	shareholders	bondholders

64 When comparing debt and equity in a company, the higher returns are most likely to go to:

- (a) equity, because equity has the higher risk
- (b) equity, because they do not get tax relief
- (c) debt, because equity is entitled to all the residual profits
- (d) debt, because debt benefits from the corporate tax relief on interest

65 A company:

- has an average cost of capital of 14%,
- earns 16% on funds retained in the company
- has a cost of equity of 20%.
- traditionally pays out 30% of its earnings as dividends,

What is the best estimate of the dividend growth rate?

- (a) 4%
- (b) 5%
- (c) 6%
- (d) 10%
- (e) 11%
- (f) 14%

- 66 A company has a market share price of 4.86 and a book value per share of 4.00. It has just paid out a dividend of 0.50 per share. If the dividend growth rate is anticipated to be 7%, then the best approximation of its cost of equity is:
- (a) 20%
 - (b) 19%
 - (c) 18%
 - (d) 12%
- 67 A well-diversified investor has a share on which she requires a return of 10%. The risk free rate is 4%. On this investment, over the coming year, the investor:
- (a) could have a return of minus 100%
 - (b) will achieve a return of at least 10%
 - (c) will achieve a return of at least 6%
 - (d) will achieve a return of at least 4%
- 68 After the planning horizon:
- (a) cash flows are always assumed to be constant per annum
 - (b) the value created is assumed to be zero
 - (c) the performance spread is assumed to be non zero and constant
- 69 A company has two divisions, A and B. Within the planning horizon, for each division:

	A	B
Expected return	14%	12%
Required return under CAPM	15%	11%

Assuming such action is possible, how should the company change its allocation of capital to maximise shareholders' wealth?

- | | Investment in A | Investment in B |
|-----|------------------------|------------------------|
| (a) | increase | increase |
| (b) | increase | decrease |
| (c) | decrease | increase |
| (d) | decrease | decrease |

70 For a retail company, the possible loss of sales due to heavy snow forecast next week is best described as:

- (a) risk
- (b) volatility
- (c) uncertainty
- (d) pre-transaction exposure

71 Lower borrowing interest costs will usually be achieved by:

- (a) increasing gearing
- (b) accepting restrictive loan covenants
- (c) bootstrapping
- (d) actively pursuing riskier business rather than higher returns
- (e) making a special dividend payment

72 In a listed company, who is normally responsible for:

	Setting gearing targets?	Organising a rights issue?
(a)	Board/RMC	Board/RMC
(b)	Board/RMC	Treasurer
(c)	Treasurer	Board/RMC
(d)	Treasurer	Treasurer

73 The average risk free interest rate is 2%. The FTSE world index returned minus 1% last year, and similar poor equity returns are forecast for the coming year. Over the longer term, it is expected that the market risk premium will be 6%.

A company has a beta of one. Under CAPM, the company's cost of equity is:

- (a) minus 1%
- (b) 1%
- (c) 3%
- (d) 3.5%
- (e) 8%

74 A sample taken from a larger population has the following values:

4, 10, 12, 6.

The best estimate of the standard deviation for the whole population is:

- (a) 1.6
- (b) 2.1
- (c) 3.2
- (d) 3.7
- (e) 10.0
- (f) 13.3

75 EUR/GBP spot is currently 0.7000, has a 30 day standard deviation of 8%, and can be assumed to be normally distributed. At a confidence level of 95%, EUR 7 million due to be received in 30 days will be worth at least GBP million:

- (a) 4.0
- (b) 4.3
- (c) 4.9
- (d) 5.7
- (e) 6.1
- (f) 7.0

76 A currency fluctuation clause in a contract allows a company to change the contract price in a pre-defined manner for pre-defined changes in a specified exchange rate.

Including a currency fluctuation clause in a contract is best classified as the following risk response:

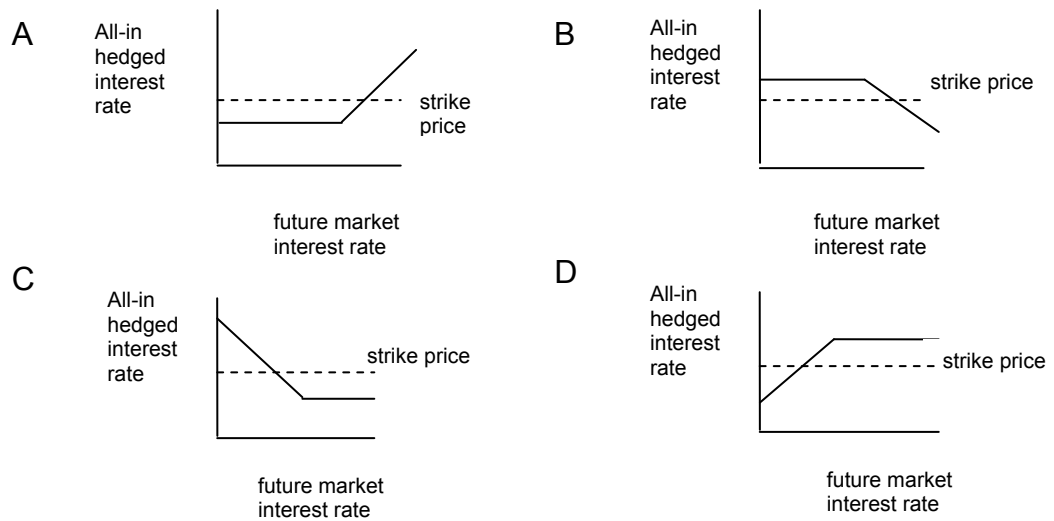
- (a) avoid
- (b) accept and retain
- (c) accept and reduce
- (d) accept and transfer

77 A company is funded solely by a large overdraft and has no cash. All else being equal, what is the impact of a rise in interest rates?

- | | The market value of debt: | Interest cover: |
|-----|----------------------------------|------------------------|
| (a) | falls | worsens |
| (b) | falls | is unchanged |
| (c) | is unchanged | worsens |
| (d) | is unchanged | is unchanged |

- 78 A ZAR based company, SA, buys foreign products in USD and sells them in ZAR. Foreign exchange risk arising from the issue of an annual price list by SA is best described as:
- (a) transactional exposure
 - (b) pre-transactional exposure
 - (c) translation exposure
 - (d) no foreign exposure is likely to arise as prices are fixed in ZAR
- 79 End-users of futures making profits by exploiting price anomalies between futures markets and the underlying asset markets are known as:
- (a) hedgers
 - (b) speculators
 - (c) market makers
 - (d) arbitrageurs
- 80 A company requires 10,000 kg of tea in four months' time and purchases futures contracts at USD 1.80 per kg to hedge this exposure. Four months later, the futures contracts are sold at USD 1.72 per kg and the spot market price for tea is USD 1.70 per kg. The all-in cost of the tea is USD:
- (a) 17,000
 - (b) 17,200
 - (c) 17,800
 - (d) 18,000
 - (e) 18,200
- 81 A put option has a premium of 50 and a strike price of 250. The maximum possible cash loss arising from the purchase of this option is:
- (a) infinite
 - (b) 300
 - (c) 250
 - (d) 50
 - (e) nil - no loss possible

82 An interest rate option has been used to hedge the interest cost of a floating rate borrowing.



The resultant all-in hedged interest rate profile is illustrated by diagram:

- (a) A
- (b) B
- (c) C
- (d) D

83 The financial director (FD) tells the treasurer to fix the interest due to be paid in 2 months' time on floating rate debt linked to 6-month LIBOR. What should the treasurer do?

- (a) Purchase a 2 v 6 FRA
- (b) Purchase a 2 v 8 FRA
- (c) Sell a 2 v 6 FRA
- (d) Sell a 2 v 8 FRA
- (e) Inform the FD it is too late to hedge this item

- 84 BX sold an 8v10 FRA over GBP 3 million at a rate of 3%.
Two months later BX cancels the FRA, when market rates are:

8 month LIBOR: 4.0%
6 v 8 FRA : 4.70 - 4.80%

The best estimate of the settlement amount on the cancellation date is GBP:

- (a) 8,279
- (b) 8,767
- (c) 8,824
- (d) 8,940
- (e) 13,149
- (f) 13,410

- 85 6 month LIBOR rates have been:

1 April 2010 5%
1 October 2010 4.5%
1 April 2011 4%

A company has a USD 50 million pay-fixed 5%, receive-floating 6 month LIBOR swap. The best estimate of the net USD amount paid or received on 1 October 2010 under the swap was:

- (a) 125,000 payment
- (b) no payment or receipt
- (c) 125,000 receipt
- (d) 250,000 receipt
- (e) 500,000 receipt

- 86 A GBP company

- issues a 2 year EUR 100 million 4% (annual) fixed rate bond, and
- enters into a 2 year cross currency swap of EUR 60 million at 4% against equivalent GBP 75 million at 4% on an annual basis to reduce its EUR exposure.

The net all-in EUR interest payments at the end of the first year will be:

- (a) 4 million
- (b) 2.4 million
- (c) 1.6 million
- (d) nil

87 A company has an interest rate swap with the following characteristics:

- nominal value EUR 60 million
- receive fixed at 2% versus pay floating at 12 month LIBOR
- 4 years left to run

The 4 year annual swap rate is now 3%. The best estimate of the current value of the swap to the company is:

- (a) EUR 2.23 million loss
- (b) EUR 2.28 million loss
- (c) EUR 7.02 million loss
- (d) EUR 2.23 million profit
- (e) EUR 2.28 million profit
- (f) EUR 7.02 million profit

88 A company buys a 10 million cap with a semi-annual strike price of 6% against LIBOR. Under the cap alone, the best estimate of the amount paid or received by the company for a period when LIBOR is set at 4% is:

- (a) 200,000 paid
- (b) 100,000 paid
- (c) nil
- (d) 100,000 received
- (e) 200,000 received

89 Assume the following market rates:

GBP/USD spot: 1.8000
GBP/USD 3 months forward: 1.8200

A company requires an out-of-the-money option contract to sell USD for GBP in three months' time. Which of the following available strike prices could be chosen?

	1.7800	1.8000	1.8200	1.8400
(a)	Y	Y	Y	N
(b)	Y	Y	N	N
(c)	Y	N	N	N
(d)	N	N	N	Y
(e)	N	N	Y	Y
(f)	N	Y	Y	Y

- 90 A swaption is best described as:
- (a) an option to enter into an interest rate swap
 - (b) an option to enter into an interest rate option
 - (c) a swap with an early cancellation option
 - (d) a swap with an option to convert to a collar
 - (e) a swap with an option to convert to a cap
- 91 Long term investment management forms part of which Treasury Core Element?
- (a) Cash and liquidity management
 - (b) Capital markets and funding management
 - (c) Corporate financial management
 - (d) Risk management
 - (e) Treasury operations and control
- 92 Which of the following is most likely to be found as part of the treasury function?
- (a) Insurance management
 - (b) Pension risk management
 - (c) Liquidity risk management
 - (d) Working capital management
- 93 The following are examples of systems which provide two-way information flows into a TMS:

	Balance Reporting	Confirmation Matching	Market information
(a)	yes	yes	yes
(b)	yes	yes	no
(c)	yes	no	yes
(d)	yes	no	no
(e)	no	yes	no
(f)	no	no	yes

- 94 Which of the following are standard functions found in a modern TMS?

	Generate accounting entries	Generate settlement instructions	Monitor dealer limits
(a)	yes	yes	yes
(b)	yes	yes	no
(c)	yes	no	yes
(d)	no	yes	yes

- 95 Which of the following statements about a company's external controls is true?
- (a) External controls provide the first line of defence against fraud
 - (b) Banks usually check users when authorising instructions
 - (c) The company's system integrity determines that users are authorised
 - (d) External controls should ensure a valid connection between two organisations

- 96 The most important function of a digital signature is:

- (a) authentication
- (b) authorisation
- (c) segregation of duties
- (d) transaction processing

- 97 A company's policy for managing foreign exchange risk states:

"75% of assets denominated in foreign currency must be hedged".

Which of the following statements is true?

- (a) The policy addresses a financial risk
- (b) Treasury has precise direction on action it must take
- (c) There is a strong key performance indicator
- (d) The objective of the policy is clear

- 98 Corporate treasury KPIs may measure which of the following?

	Quality of advice	Return against target	Risk versus benchmarks
(a)	yes	yes	yes
(b)	yes	yes	no
(c)	no	yes	yes
(d)	no	yes	no
(e)	no	no	yes

- 99 Which of the following is most likely to be the responsibility of the Risk Management Committee?

- (a) Manages the day to day operation of the treasury function
- (b) Designs detailed treasury operating procedures
- (c) Appoints dealing staff
- (d) Reviews treasury performance

- 100 Under the ACT Ethical Code, which of the following is included within the fundamental principle of 'integrity'?
- (a) Independence in making professional judgements
 - (b) Avoiding conflicts of interest between self and employer
 - (c) Compliance with technical and professional standards
 - (d) Refraining from disclosing confidential information

CertITM Formulae provided in exam

Present Value and future value formulae

1. Annuity factor $= \frac{1}{r} \times \left(1 - \frac{1}{(1+r)^n} \right)$ or $= (1-DF) \div r$
2. $PV = \frac{C}{(r-g)}$
3. $IRR\% = a\% + \frac{A}{(A-B)}(b\% - a\%)$

Manipulating interest rates

4. $r = \frac{d}{1-d}$ and $d = \frac{r}{1+r}$
5. $1+r = \frac{1+n}{1+i}$
6. $\frac{1+r_V}{1+r_B} \times \text{Spot}(B/V) = \text{Forward}(B/V)$
7. $C = \frac{100(1-DF_n)}{\text{CUM } DF_n}$

Corporate Finance formulae

8. $WACC = k_d \times (1-T_c) \times \frac{D}{D+E} + k_E \times \frac{E}{D+E}$
9. $k_E = r_f + \beta(r_m - r_f)$
10. $P = \frac{d_1}{k_E - g}$
11. $g = r \times b$

Statistical formulae

12. Variance $[X] = \sigma^2 = \frac{\text{Sum of squared differences of observations from the mean}}{\text{Number in population}}$
13. Variance $[X] = \sigma^2 = \frac{\text{Sum of squared differences of observations from the mean}}{(\text{Number in sample} - 1)}$
14. $\text{VaR} = Z \times \sigma_{\text{TIME}} \times \text{Exposure}$
15. $Z = \frac{X - \mu}{\sigma}$

Instruments

16. $\text{future value} = \text{principal amount} \times \left(1 + \text{issue rate \%} \times \frac{\text{original life}}{\text{year (360 or 365)}} \right)$
17. $\text{present value} = \text{future value} \div \left(1 + \text{current market yield} \times \frac{\text{days left to run}}{\text{year (360 or 365)}} \right)$
18. $S = P \times (R_m - R_f) \times \frac{\text{days}}{\text{year}} \times \frac{1}{1 + R_m \times \frac{\text{days}}{\text{year}}}$

Ratios

19. $\text{ROCE} = \frac{\text{Operating profit}}{\text{Capital employed (share capital and reserves plus net debt)}}$
20. $\text{Operating profit margin} = \frac{\text{operating profits}}{\text{revenue}}$
21. $\text{Asset turnover} = \text{asset revenue} = \frac{\text{revenues}}{\text{capital employed}}$
22. $\text{Current ratio} = \frac{\text{current assets}}{\text{current liabilities}}$
23. $\text{Acid test} = \frac{\text{current assets less inventory}}{\text{current liabilities}}$
24. $\text{Trade receivables days} = \frac{\text{trade receivables (net of sales taxes)}}{\text{average sales per day (sales/365)}}$
25. $\text{Leverage} = \frac{\text{Debt}}{\text{Debt} + \text{Equity}}$

NORMAL DISTRIBUTION TABLE



Area under the normal distribution curve between the mean and Z standard deviations from the mean.

Z	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
0.0	0.0000	0.0040	0.0080	0.0120	0.0160	0.0199	0.0239	0.0279	0.0319	0.0359
0.1	0.0398	0.0438	0.0478	0.0517	0.0557	0.0596	0.0636	0.0675	0.0714	0.0753
0.2	0.0793	0.0832	0.0871	0.0910	0.0948	0.0987	0.1026	0.1064	0.1103	0.1141
0.3	0.1179	0.1217	0.1255	0.1293	0.1331	0.1368	0.1406	0.1443	0.1480	0.1517
0.4	0.1554	0.1591	0.1628	0.1664	0.1700	0.1736	0.1772	0.1808	0.1844	0.1879
0.5	0.1915	0.1950	0.1985	0.2019	0.2054	0.2088	0.2123	0.2157	0.2190	0.2224
0.6	0.2257	0.2291	0.2324	0.2357	0.2389	0.2422	0.2454	0.2486	0.2517	0.2549
0.7	0.2580	0.2611	0.2642	0.2673	0.2704	0.2734	0.2764	0.2794	0.2823	0.2852
0.8	0.2881	0.2910	0.2939	0.2967	0.2995	0.3023	0.3051	0.3078	0.3106	0.3133
0.9	0.3159	0.3186	0.3212	0.3238	0.3264	0.3289	0.3315	0.3340	0.3365	0.3389
1.0	0.3413	0.3438	0.3461	0.3485	0.3508	0.3531	0.3554	0.3577	0.3599	0.3621
1.1	0.3643	0.3665	0.3686	0.3708	0.3729	0.3749	0.3770	0.3790	0.3810	0.3830
1.2	0.3849	0.3869	0.3888	0.3907	0.3925	0.3944	0.3962	0.3980	0.3997	0.4015
1.3	0.4032	0.4049	0.4066	0.4082	0.4099	0.4115	0.4131	0.4147	0.4162	0.4177
1.4	0.4192	0.4207	0.4222	0.4236	0.4251	0.4265	0.4279	0.4292	0.4306	0.4319
1.5	0.4332	0.4345	0.4357	0.4370	0.4382	0.4394	0.4406	0.4418	0.4429	0.4441
1.6	0.4452	0.4463	0.4474	0.4484	0.4495	0.4505	0.4515	0.4525	0.4535	0.4545
1.7	0.4554	0.4564	0.4573	0.4582	0.4591	0.4599	0.4608	0.4616	0.4625	0.4633
1.8	0.4641	0.4649	0.4656	0.4664	0.4671	0.4678	0.4686	0.4693	0.4699	0.4706
1.9	0.4713	0.4719	0.4726	0.4732	0.4738	0.4744	0.4750	0.4756	0.4761	0.4767
2.0	0.4772	0.4778	0.4783	0.4788	0.4793	0.4798	0.4803	0.4808	0.4812	0.4817
2.1	0.4821	0.4826	0.4830	0.4834	0.4838	0.4842	0.4846	0.4850	0.4854	0.4857
2.2	0.4861	0.4864	0.4868	0.4871	0.4875	0.4878	0.4881	0.4884	0.4887	0.4890
2.3	0.4893	0.4896	0.4898	0.4901	0.4904	0.4906	0.4909	0.4911	0.4913	0.4916
2.4	0.4918	0.4920	0.4922	0.4925	0.4927	0.4929	0.4931	0.4932	0.4934	0.4936
2.5	0.4938	0.4940	0.4941	0.4943	0.4945	0.4946	0.4948	0.4949	0.4951	0.4952
2.6	0.4953	0.4955	0.4956	0.4957	0.4959	0.4960	0.4961	0.4962	0.4963	0.4964
2.7	0.4965	0.4966	0.4967	0.4968	0.4969	0.4970	0.4971	0.4972	0.4973	0.4974
2.8	0.4974	0.4975	0.4976	0.4977	0.4977	0.4978	0.4979	0.4979	0.4980	0.4981
2.9	0.4981	0.4982	0.4982	0.4982	0.4984	0.4984	0.4985	0.4985	0.4986	0.4986
3.0	0.4987	0.4987	0.4987	0.4988	0.4988	0.4989	0.4989	0.4989	0.4990	0.4990

Solutions – ITM October 2011

Q	A
1	a
2	e
3	c
4	b
5	d
6	b
7	a
8	d
9	a
10	b
11	d
12	b
13	b
14	e
15	b
16	a
17	b
18	b, c
19	a
20	d
21	a
22	d
23	b
24	d
25	d
26	c
27	b
28	a
29	c
30	b
31	b
32	b, d
33	b

Q	A
34	b
35	b
36	d
37	a
38	c
39	c
40	c
41	d
42	d
43	b
44	d
45	d
46	a
47	c
48	b
49	b
50	c
51	d
52	c
53	d
54	a
55	a
56	a
57	a
58	c
59	c
60	a
61	d
62	d
63	a
64	a
65	e
66	c

Q	A
67	a
68	b
69	c
70	a
71	b
72	a, b
73	e
74	d
75	a, b
76	c, d
77	c
78	b
79	d
80	c
81	d
82	d
83	e
84	b
85	b
86	c
87	a
88	c
89	d
90	a
91	c
92	c
93	e
94	a
95	b, d
96	a
97	a
98	a
99	d
100	b

Examiners Report

Certificate in International Treasury Management October 2011

The exam consisted of 28,20,21,21, and 10 questions from study units 1 to 5 respectively. Numbers in brackets refer to the April 2011 sitting.

Ten (3) candidates selected more than one answer to a single question. These scripts were carefully examined to check that one of these answers had not been badly erased, and this was not the case. No credit can be given where more than one answer is selected for a single question.

Some candidates chose not to answer all questions. Marks are NOT deducted for incorrect answers, and candidates are therefore encouraged to give an answer for all questions, even those where they are unsure of the correct answer.

Many candidates appear to find questions where the stem of the question is a negative statement or question, or those questions where one or more of the options are negative, particularly difficult. Whilst the exam is structured so as to minimise such questions, in some cases they are unavoidable. Candidates are advised to approach such questions with particular care.

After the exam, and with the aid of both statistical analysis and candidate feedback, the ITM board identified 6 (4) questions where it decided that more than one option deserved full credit.

The pass mark is designed to reflect the average performance expected of a competent student with a reasonable familiarity with the ITM learning materials who has studied reasonably diligently. A pass mark was set before the exam by assessing the difficulty of each question and collating these judgements. Following post exam analysis, the ITM Board chose to reduce the pass mark set before the exam.

Following this adjustment, the pass rate for this diet was 72.5% (68.9%). The maximum score in this exam was 98% (93%) and the minimum was 26% (18%). A random selection of options in the exam would on average score 25% (23%).

The pass rate for each study unit was as follows:

	Full	SU 1	SU 2	SU 3	SU 4	SU 5
Oct 11 %	72.5	63.7	77.3	77.3	66.5	75.2
Apr 11 %	68.9	58.7	75.8	69.3	63.6	67.0

As with the last diet, the pass rate for questions testing calculations, at 60.1% (56.1%) was significantly lower than for those questions testing knowledge, at 77.9% (81.8%). As with previous diets, this is likely to have particularly depressed the pass rate for SU1 and SU4. Candidates are recommended to pay particular attention to this area in the future.

The correlation between performance in calculation questions and the overall exam, and between knowledge questions and the overall exam was similar and high, as it was in April 11. This supports the view that students must score reasonably in both types of question to pass the exam overall.

This exam again saw a significantly better performance by those with professional accounting qualifications as compared to those students with no such qualification. The examiner recommends non-accountants who intend to attempt CertITM should take the AMCT stage one papers (Certificate in Financial Fundamentals for Business: CertFin) prior to CertITM. CertFin provides a framework of core knowledge and establishes the underlying financial understanding that underpins corporate treasury.

All candidates, but particularly those in non-OECD countries or those for whom English is not their first language, are encouraged make full use of the ITM website forum and to study the ACT material diligently.

The question pass rates were as follows:

% passing question	Questions
0 - 40	2 3 8 20 24 67 68 83 84 93
40 - 50	12 23 28 36 37 41 47 87
50 - 60	5 9 22 32 34 35 44 62 65 82 88 89 98
60 - 70	6 7 11 15 17 19 21 39 45 52 57 58 60 70 74 75 78 80 85 86 91 95 97 100
70 - 80	4 10 16 18 25 29 33 42 43 48 51 53 56 61 66 69 73 77 79 81 92 94
80 - 90	1 13 14 26 27 38 40 46 49 54 55 59 64 71 90 96 99
90 - 100	30 31 50 63 72 76

The ITM board wishes to thank those candidates who chose to raise issues associated with either the syllabus, learning materials or relationship between practice and ACT materials on the ITM website after the exam.