



Financial Pillar

F1 – Financial Operations

26 May 2011 – Thursday Morning Session

Instructions to candidates

You are allowed three hours to answer this question paper.
You are allowed 20 minutes reading time before the examination begins during which you should read the question paper and, if you wish, highlight and/or make notes on the question paper. However, you will not be allowed, under any circumstances , to open the answer book and start writing or use your calculator during this reading time.
You are strongly advised to carefully read ALL the question requirements before attempting the question concerned (that is all parts and/or sub-questions).
ALL answers must be written in the answer book. Answers written on the question paper will not be submitted for marking.
You should show all workings as marks are available for the method you use.
ALL QUESTIONS ARE COMPULSORY.
Section A comprises 10 sub-questions and is on pages 3 to 6.
Section B comprises 6 sub-questions and is on pages 8 to 11.
Section C comprises 2 questions and is on pages 12 to 16.
The country 'Tax Regime' for the paper is provided on page 2. Maths tables and formulae are provided on pages 17 and 18.
The list of verbs as published in the syllabus is given for reference on page 19.
Write your candidate number, the paper number and examination subject title in the spaces provided on the front of the answer book. Also write your contact ID and name in the space provided in the right hand margin and seal to close.
Tick the appropriate boxes on the front of the answer book to indicate the questions you have answered.

F1 – Financial Operations

COUNTRY X - TAX REGIME FOR USE THROUGHOUT THE EXAMINATION PAPER

Relevant Tax Rules for Years Ended 31 March 2007 to 2011

Corporate Profits

Unless otherwise specified, only the following rules for taxation of corporate profits will be relevant, other taxes can be ignored:

- Accounting rules on recognition and measurement are followed for tax purposes.
- All expenses other than depreciation, amortisation, entertaining, taxes paid to other public bodies and donations to political parties are tax deductible.
- Tax depreciation is deductible as follows:
 - 50% of additions to Property, Plant and Equipment in the accounting period in which they are recorded;
 - 25% per year of the written-down value (i.e. cost minus previous allowances) in subsequent accounting periods except that in which the asset is disposed of;
 - No tax depreciation is allowed on land.
- The corporate tax on profits is at a rate of 25%.
- No indexation is allowable on the sale of land.
- Tax losses can be carried forward to offset against future taxable profits from the same business.

Value Added Tax

Country X has a VAT system which allows entities to reclaim input tax paid.
In country X the VAT rates are:

Zero rated	0%
Standard rated	15%

SECTION A – 20 MARKS

[You are advised to spend no longer than 36 minutes on this section]

ANSWER ALL TEN SUB-QUESTIONS IN THIS SECTION

Instructions for answering Section A:

The answers to the ten sub-questions in Section A should ALL be written in your answer book.

Your answers should be clearly numbered with the sub-question number and then ruled off, so that the markers know which sub-question you are answering.

For multiple choice questions, you need only write the sub-question number and the letter of the answer option you have chosen. You do not need to start a new page for each sub-question.

Question One

1.1 In Country Y, A earns \$75,000 profit for the year and receives a tax bill for \$17,000.

B earns \$44,000 profit for the year and receives a tax bill for \$4,800.

Country Y's income tax could be said to be a:

- A Regressive tax
- B Proportional tax
- C Progressive tax
- D Fixed rate tax

(2 marks)

1.2 Tax deducted at source by employers from employees' earnings and paid to government, often called pay-as-you-earn (PAYE) has a number of advantages.

- (i) Most of the administration costs are borne by the employer.
- (ii) Employers may delay payment or fail to pay over PAYE deducted from employees.
- (iii) Employers may be inefficient and not deduct any tax or deduct the wrong amount from employees.
- (iv) Government receives a higher proportion of the tax due as defaults and late payments are fewer.

Which TWO of the above are NOT likely to be seen as an advantage of PAYE by the Government?

- A (i) and (ii)
- B (ii) and (iii)
- C (ii) and (iv)
- D (iii) and (iv)

(2 marks)

TURN OVER

- 1.3** The Organisation for Economic Co-operation and Development's (OLCD) model tax convention defines corporate residence.

In no more than 15 words complete the following sentence:

Under the OECD model an entity will have residence....

(2 marks)

- 1.4** P is a trader resident in Country X. P imports products from a foreign country. Each unit costs \$15.00 to purchase and on import is subject to an excise duty of \$3.00 per unit. P also has to pay VAT at standard rate on all imports. If P imports 2,000 units how much would the tax authorities be due on import?

- A** \$4,500
- B** \$6,000
- C** \$10,500
- D** \$11,400

(2 marks)

- 1.5** Which TWO of the following are most likely to encourage an increase in the incidence of tax avoidance or tax evasion?

- (i) High penalties for any tax evasion
- (ii) Imprecise and vague tax laws
- (iii) A tax system that is seen as fair to everyone
- (iv) Very high tax rates

- A** (i) and (ii)
- B** (ii) and (iii)
- C** (ii) and (iv)
- D** (iii) and (iv)

(2 marks)

- 1.6** According to IAS 8 *Accounting policies, changes in accounting estimates and errors*, which ONE of the following is a change in accounting policy requiring a retrospective adjustment in financial statements for the year ended 31 December 2010?

- A** The depreciation of the production facility has been reclassified from administration expenses to cost of sales in the current and future years.
- B** The depreciation method of vehicles was changed from straight line depreciation to reducing balance.
- C** The provision for warranty claims was changed from 10% of sales revenue to 5%.
- D** Based on information that became available in the current period a provision was made for an injury compensation claim relating to an incident in a previous year.

(2 marks)

1.7 According to IFRS 8 *Operating Segments* which TWO of the following apply to reportable segments?

- (i) The results of the segment must be prepared using the same accounting policies as are used for the financial statements.
- (ii) A reportable segment is a component of the entity whose operating results are regularly reviewed by the entity's chief operating decision maker in order to make decisions about resource allocations.
- (iii) Information for reportable segments is required to be prepared based on products and geographical areas.
- (iv) A reportable segment is every segment that accounts for 10% or more of the sales revenue.

- A** (i) and (ii)
- B** (i) and (iii)
- C** (ii) and (iii)
- D** (ii) and (iv)

(2 marks)

1.8 HA acquired 100% of SB's equity shares on 1 April 2010 for \$185,000. The values of SB's assets at that date were:

	<i>Book value</i>	<i>Fair value</i>
	<i>\$000</i>	<i>\$000</i>
Property	100	115
Plant and equipment	75	70

On 1 April 2010 all other assets and liabilities had a fair value approximately equal to their book value.

SB's equity at 1 April 2010 was:

	<i>\$000</i>
\$1 equity shares	150
Share premium	15
Retained earnings	(22)

Calculate the goodwill arising on the acquisition of SB.

(2 marks)

TURN OVER

- 1.9 The HC group acquired 30% of the equity share capital of AF on 1 April 2010 paying \$25,000.

At 1 April 2010 the equity of AF comprised:

	\$
\$1 equity shares	50,000
Share premium	12,500
Retained earnings	10,000

AF made a profit for the year to 31 March 2011 (prior to dividend distribution) of \$6,500 and paid a dividend of \$3,500 to its equity shareholders.

Calculate the value of HC's investment in AF for inclusion in HC's statement of financial position at 31 March 2011.

(2 marks)

-
- 1.10 HB sold goods to S2, its 100% owned subsidiary, on 1 November 2010. The goods were sold to S2 for \$33,000. HB made a profit of 25% on the original cost of the goods.

At the year end, 31 March 2011, 50% of the goods had been sold by S2. The remaining goods were included in inventory.

Calculate the amount of the adjustment required to inventory in the consolidated statement of financial position at 31 March 2011.

(2 marks)

(Total for Section A = 20 marks)

Reminder

All answers to Section A must be written in your answer book.
Answers or notes to Section A written on the question paper will
not be submitted for marking.

End of Section A

Section B starts on the next page

TURN OVER

SECTION B – 30 MARKS

[You are advised to spend no longer than 9 minutes on each sub-question in this section.]

ANSWER ALL SIX SUB-QUESTIONS IN THIS SECTION – 5 MARKS EACH

Question Two

- (a) FG, an entity operating in Country X, purchased a machine costing \$500,000 on 1 April 2009, which qualified for tax depreciation allowances. All other non-current assets are leased.

FG's policy in respect of machines is to charge depreciation on a straight line basis over 5 years, with no residual value.

FG had profits of \$192,000 for the year ended 31 March 2011. These profits are after charging depreciation and before adjusting for tax allowances.

Required:

Use the above information to:

- (i) **Calculate** FG's corporate income tax due for the year ended 31 March 2011.
(2 marks)
- (ii) **Calculate** the deferred tax charge to FG's income statement for the year ended 31 March 2011 in accordance with IAS 12 *Income Taxes*.

(3 marks)

(Total for sub-question (a) = 5 marks)

- (b) JK, an entity operating in Country X, purchased land on 1 March 2008 for \$850,000. JK incurred purchase costs of surveyor's fees \$5,000 and legal fees \$8,000. JK spent \$15,000 clearing the land and making it suitable for development. Local tax regulations classified all of JK's expenditure as capital expenditure.

JK sold the land for \$1,000,000 on 1 February 2011, incurring tax allowable costs of \$6,000.

Assume JK had no temporary differences between taxable and accounting profits.

Required:

- (i) **Explain** the meaning of a capital gain and capital gains tax. *(2 marks)*

- (ii) Use the above information to **calculate** the capital gains tax due on the disposal of JK's land. *(3 marks)*

(Total for sub-question (b) = 5 marks)

(c) HC acquired a 75% holding in SU on 1 April 2010.

HC received a dividend from SU of \$156,000, the amount received is after deduction of withholding tax of 20%. SU profit before tax was \$650,000 and it paid corporate income tax of \$130,000 in respect of these profits.

Required:

(i) **Explain** the meaning of "underlying tax". *(2 marks)*

(ii) **Calculate** the amount of underlying tax that HC can claim for double tax relief. *(3 marks)*

(Total for sub-question (c) = 5 marks)

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(d)

Generally accepted accounting practice (GAAP) in a country can be based on legislation and accounting standards that are either

- very prescriptive in nature; or
- principle-based

Required:

Explain the possible advantages of having principle-based accounting standards as opposed to prescriptive standards.

(Total for sub-question (d) = 5 marks)

(e)

Required:

- (i) **Explain** the objective of financial statements according to the IASB's *Framework for the Preparation and Presentation of Financial Statements* (Framework).

(2 marks)

- (ii) **Explain** the underlying assumptions outlined in the *Framework*.

(3 marks)

(Total for sub-question (e) = 5 marks)

- (f) CX, a professional accountant, is facing a dilemma. She is working on the preparation of a long term profit forecast required by the local stock market listing regulations prior to a new issue of equity shares.

At a previous management board meeting, her projections had been criticised by board members as being too pessimistic. She was asked to review her assumptions and increase the profit projections.

She revised her assumptions, but this had only marginally increased the forecast profits.

At yesterday's management board meeting the board members had discussed her assumptions and specified new values to be used to prepare a revised forecast. In her view the new values grossly overestimate the forecast profits.

The management board intends to publish the final revised forecasts.

Required:

Explain the ethical problems that CX faces and **identify** her possible options. You should refer to CIMA's Code of ethics for professional accountants

(Total for sub-question (f) = 5 marks)

(Total for Section B = 30 marks)

End of Section B

Section C starts on page 12

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SECTION C – 50 MARKS

[You are advised to spend no longer than 45 minutes on each question in this section.]

ANSWER *BOTH* QUESTIONS FROM THIS SECTION – 25 MARKS EACH

Question Three

MN operates a number of retail outlets around the country. One retail outlet was closed on 31 March 2011 when trading ceased and the outlet was put up for sale. All income and expenses of the outlet are included in the trial balance. The retail outlet is regarded as a cash generating unit, all its assets are being sold as one unit. At 31 March 2011 the directors are certain that the outlet meets the requirements of IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations* for treatment as non-current assets held for sale.

MN's trial balance at 31 March 2011 is shown below:

	<i>Further Information</i>	\$'000	\$'000
Administration expenses	(ii)	160	
Cash and cash equivalents			14
Cost of goods sold	(ii)	622	
Distribution costs	(ii)	170	
Equity dividend paid		30	
Inventory at 31 March 2011		65	
Long term borrowings	(vii)		300
Equity shares \$1 each, fully paid			600
Property, plant and equipment – net book value at 31 March 2010	(i) to (iii)	2,073	
Provision for deferred tax at 31 March 2010	(vi)		83
Provision for repairs under warranty at 31 March 2010	(iv)		76
Retained earnings at 31 March 2010			777
Revenue	(ii)		1,120
Share premium at 31 March 2010			200
Trade payables			51
Trade receivables		101	
		<hr/>	<hr/>
		3,221	3,221

Further information:

- (i) The book values of the property, plant and equipment at 31 March 2010 were as follows:

<i>Asset type</i>	<i>Cost – continuing activities</i>	<i>Cost – discontinued operations</i>	<i>Accumulated Depreciation - continuing activities</i>	<i>Accumulated Depreciation - discontinued operations</i>	<i>Net Book Value</i>
	<i>\$'000</i>	<i>\$'000</i>	<i>\$'000</i>	<i>\$'000</i>	<i>\$000</i>
Land	1,220	150	0	0	1,370
Buildings	700	40	140	20	580
Plant & equipment	<u>240</u>	<u>60</u>	<u>142</u>	<u>35</u>	<u>123</u>
	<u>2,160</u>	<u>250</u>	<u>282</u>	<u>55</u>	<u>2,073</u>

- (ii) The fair value less cost to sell of the assets of the closed retail outlet at 31 March 2011 was \$176,000.

The results of the closed outlet for the period 1 April 2010 to 31 March 2011 were as follows:

	<i>\$</i>
Revenue	80,000
Cost of sales	(130,000)
Administration expenses	(40,000)
Distribution costs	(90,000)

- (iii) MN depreciates buildings at 5% per annum on the straight-line basis and plant and equipment at 20% per annum using the reducing balance method. Depreciation is included in cost of sales.
- (iv) MN sells electronic goods with a one year warranty. At 31 March 2010 MN created a provision of \$76,000 for the cost of honouring the warranties at that date. On 31 March 2011 the outstanding warranties were reviewed and the following estimates prepared:

<i>Scenario</i>	<i>Probability</i>	<i>Anticipated cost</i>
worse case	10%	\$190,000
best case	15%	\$20,000
most likely	75%	\$80,000

All warranties relate to continuing activities. Actual repair costs incurred during the year were charged to cost of sales.

- (v) The directors estimate the income tax charge on the year's profits at \$67,000, of this a tax reduction of \$10,000 relates to discontinued operations.
- (vi) The deferred tax provision is to be reduced to \$78,000.
- (vii) The long term borrowings incur annual interest at 4% per year paid annually in arrears.

Required:

Prepare MN's statement of comprehensive income and statement of changes in equity for the year to 31 March 2011 AND a statement of financial position at that date, in a form suitable for presentation to the shareholders and in accordance with the requirements of International Financial Reporting Standards.

Notes to the financial statements are not required, but all workings must be clearly shown. Do not prepare a statement of accounting policies.

(Total for Question Three = 25 marks)

Section C continues on page 14

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Question Four

Extracts of OP's financial statements for the year ended 31 March 2011 are as follows:

OP Statement of Financial Position as at:

	31 March 2011		31 March 2010	
	\$000	\$000	\$000	\$000
Non-current Assets				
Property, plant and equipment	977		663	
Development expenditure	60		65	
Brand name	<u>30</u>	1,067	<u>40</u>	768
Current Assets				
Inventory	446		450	
Trade receivables	380		310	
Cash and cash equivalents	<u>69</u>	<u>895</u>	<u>35</u>	<u>795</u>
Total Assets		<u>1,962</u>		<u>1,563</u>
Equity and Liabilities				
Equity shares of \$1 each	400		200	
Share premium	200		100	
Revaluation reserve	30		95	
Retained earnings	<u>652</u>	1,282	<u>423</u>	818
Non-current liabilities				
Long term borrowings	100		250	
Deferred tax	<u>130</u>	230	<u>120</u>	370
Current liabilities				
Trade payables	150		95	
Current tax	250		260	
Accrued interest	10		20	
Other provisions	<u>40</u>	<u>450</u>	<u>0</u>	<u>375</u>
Total Equity and Liabilities		<u>1,962</u>		<u>1,563</u>

OP Statement of Comprehensive Income for the year ended 31 March 2011

	\$000	\$000
Revenue		10,400
Cost of sales		<u>(4,896)</u>
		5,504
Administrative expenses	(2,510)	
Distribution costs	<u>(1,890)</u>	<u>(4,400)</u>
		1,104
Finance cost		<u>(15)</u>
		1,089
Taxation		<u>(280)</u>
Profit for the year		809
Other Comprehensive Income		
Loss on revaluation of property		<u>(65)</u>
Total comprehensive income		<u>744</u>

Additional information:

- (i) Property, plant and equipment comprises:

	<i>Cost at 31 March 2011 \$000</i>	<i>Cost at 31 March 2010 \$000</i>	<i>Depreciation to 31 March 2010 \$000</i>
Land	426	320	0
Buildings	840	610	366
Plant and equipment	<u>166</u>	<u>180</u>	<u>81</u>
	<u>1,432</u>	<u>1,110</u>	<u>447</u>

- (ii) Depreciation for the year ended 31 March 2011 was:

	<i>\$000</i>
Buildings	17
Plant and equipment	25

- (iii) Plant and equipment disposed of during the year had a net book value of \$11,000 (cost \$45,000). The loss on disposal of \$6,000 is included in cost of sales.
- (iv) All land was revalued on 31 March 2011, the decrease in value of \$65,000 was deducted from the revaluation reserve.
- (v) Cost of sales includes \$15,000 for development expenditure amortised during the year and \$10,000 for impairment of the purchased brand name.
- (vi) On 1 November 2010, OP issued \$1 equity shares at a premium. No other finance was raised during the year.
- (vii) OP paid a dividend during the year.
- (viii) Other provisions relate to legal claims made against OP during the year ended 31 March 2011. The amount provided is based on legal opinion at 31 March 2011 and is included in cost of sales.

Required:

- (a) **Prepare** a statement of cash flows, using the indirect method, for OP for the year ended 31 March 2011, in accordance with IAS 7 *Statement of Cash Flows*.

(19 marks)

TURN OVER

The following information should not be included in your answer to part (a). It is only required for your answer to part (b) of the question.

OP's directors acquired equipment on 1 April 2011 on a finance lease.
The finance lease terms are:

- Lease for a ten year period
- Rentals paid annually in arrears on 31 March
- Each annual rental is \$44,000
- Original cost of the equipment was \$248,610
- The interest rate implicit in the lease is 12% per year

Required:

- (b) Calculate the amounts in respect of this finance lease that would be included in OP's;
- (i) Statement of comprehensive income for the year ended 31 March 2012
 - (ii) Statement of financial position as at 31 March 2012
 - (iii) Statement of cash flows for the year ended 31 March 2012

(6 marks)

(Total for Question Four = 25 marks)

End of Question Paper

Maths Tables and Formulae are on Pages 17 and 18

MATHS TABLES AND FORMULAE

Present value table

Present value of \$1, that is $(1 + r)^{-n}$ where r = interest rate; n = number of periods until payment or receipt.

Periods (n)	Interest rates (r)									
	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
1	0.990	0.980	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909
2	0.980	0.961	0.943	0.925	0.907	0.890	0.873	0.857	0.842	0.826
3	0.971	0.942	0.915	0.889	0.864	0.840	0.816	0.794	0.772	0.751
4	0.961	0.924	0.888	0.855	0.823	0.792	0.763	0.735	0.708	0.683
5	0.951	0.906	0.863	0.822	0.784	0.747	0.713	0.681	0.650	0.621
6	0.942	0.888	0.837	0.790	0.746	0.705	0.666	0.630	0.596	0.564
7	0.933	0.871	0.813	0.760	0.711	0.665	0.623	0.583	0.547	0.513
8	0.923	0.853	0.789	0.731	0.677	0.627	0.582	0.540	0.502	0.467
9	0.914	0.837	0.766	0.703	0.645	0.592	0.544	0.500	0.460	0.424
10	0.905	0.820	0.744	0.676	0.614	0.558	0.508	0.463	0.422	0.386
11	0.896	0.804	0.722	0.650	0.585	0.527	0.475	0.429	0.388	0.350
12	0.887	0.788	0.701	0.625	0.557	0.497	0.444	0.397	0.356	0.319
13	0.879	0.773	0.681	0.601	0.530	0.469	0.415	0.368	0.326	0.290
14	0.870	0.758	0.661	0.577	0.505	0.442	0.388	0.340	0.299	0.263
15	0.861	0.743	0.642	0.555	0.481	0.417	0.362	0.315	0.275	0.239
16	0.853	0.728	0.623	0.534	0.458	0.394	0.339	0.292	0.252	0.218
17	0.844	0.714	0.605	0.513	0.436	0.371	0.317	0.270	0.231	0.198
18	0.836	0.700	0.587	0.494	0.416	0.350	0.296	0.250	0.212	0.180
19	0.828	0.686	0.570	0.475	0.396	0.331	0.277	0.232	0.194	0.164
20	0.820	0.673	0.554	0.456	0.377	0.312	0.258	0.215	0.178	0.149

Periods (n)	Interest rates (r)									
	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1	0.901	0.893	0.885	0.877	0.870	0.862	0.855	0.847	0.840	0.833
2	0.812	0.797	0.783	0.769	0.756	0.743	0.731	0.718	0.706	0.694
3	0.731	0.712	0.693	0.675	0.658	0.641	0.624	0.609	0.593	0.579
4	0.659	0.636	0.613	0.592	0.572	0.552	0.534	0.516	0.499	0.482
5	0.593	0.567	0.543	0.519	0.497	0.476	0.456	0.437	0.419	0.402
6	0.535	0.507	0.480	0.456	0.432	0.410	0.390	0.370	0.352	0.335
7	0.482	0.452	0.425	0.400	0.376	0.354	0.333	0.314	0.296	0.279
8	0.434	0.404	0.376	0.351	0.327	0.305	0.285	0.266	0.249	0.233
9	0.391	0.361	0.333	0.308	0.284	0.263	0.243	0.225	0.209	0.194
10	0.352	0.322	0.295	0.270	0.247	0.227	0.208	0.191	0.176	0.162
11	0.317	0.287	0.261	0.237	0.215	0.195	0.178	0.162	0.148	0.135
12	0.286	0.257	0.231	0.208	0.187	0.168	0.152	0.137	0.124	0.112
13	0.258	0.229	0.204	0.182	0.163	0.145	0.130	0.116	0.104	0.093
14	0.232	0.205	0.181	0.160	0.141	0.125	0.111	0.099	0.088	0.078
15	0.209	0.183	0.160	0.140	0.123	0.108	0.095	0.084	0.079	0.065
16	0.188	0.163	0.141	0.123	0.107	0.093	0.081	0.071	0.062	0.054
17	0.170	0.146	0.125	0.108	0.093	0.080	0.069	0.060	0.052	0.045
18	0.153	0.130	0.111	0.095	0.081	0.069	0.059	0.051	0.044	0.038
19	0.138	0.116	0.098	0.083	0.070	0.060	0.051	0.043	0.037	0.031
20	0.124	0.104	0.087	0.073	0.061	0.051	0.043	0.037	0.031	0.026

Cumulative present value of \$1 per annum, Receivable or Payable at the end of each year for n years

$$\frac{1-(1+r)^{-n}}{r}$$

Periods (n)	Interest rates (r)									
	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
1	0.990	0.980	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909
2	1.970	1.942	1.913	1.886	1.859	1.833	1.808	1.783	1.759	1.736
3	2.941	2.884	2.829	2.775	2.723	2.673	2.624	2.577	2.531	2.487
4	3.902	3.808	3.717	3.630	3.546	3.465	3.387	3.312	3.240	3.170
5	4.853	4.713	4.580	4.452	4.329	4.212	4.100	3.993	3.890	3.791
6	5.795	5.601	5.417	5.242	5.076	4.917	4.767	4.623	4.486	4.355
7	6.728	6.472	6.230	6.002	5.786	5.582	5.389	5.206	5.033	4.868
8	7.652	7.325	7.020	6.733	6.463	6.210	5.971	5.747	5.535	5.335
9	8.566	8.162	7.786	7.435	7.108	6.802	6.515	6.247	5.995	5.759
10	9.471	8.983	8.530	8.111	7.722	7.360	7.024	6.710	6.418	6.145
11	10.368	9.787	9.253	8.760	8.306	7.887	7.499	7.139	6.805	6.495
12	11.255	10.575	9.954	9.385	8.863	8.384	7.943	7.536	7.161	6.814
13	12.134	11.348	10.635	9.986	9.394	8.853	8.358	7.904	7.487	7.103
14	13.004	12.106	11.296	10.563	9.899	9.295	8.745	8.244	7.786	7.367
15	13.865	12.849	11.938	11.118	10.380	9.712	9.108	8.559	8.061	7.606
16	14.718	13.578	12.561	11.652	10.838	10.106	9.447	8.851	8.313	7.824
17	15.562	14.292	13.166	12.166	11.274	10.477	9.763	9.122	8.544	8.022
18	16.398	14.992	13.754	12.659	11.690	10.828	10.059	9.372	8.756	8.201
19	17.226	15.679	14.324	13.134	12.085	11.158	10.336	9.604	8.950	8.365
20	18.046	16.351	14.878	13.590	12.462	11.470	10.594	9.818	9.129	8.514

Periods (n)	Interest rates (r)									
	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1	0.901	0.893	0.885	0.877	0.870	0.862	0.855	0.847	0.840	0.833
2	1.713	1.690	1.668	1.647	1.626	1.605	1.585	1.566	1.547	1.528
3	2.444	2.402	2.361	2.322	2.283	2.246	2.210	2.174	2.140	2.106
4	3.102	3.037	2.974	2.914	2.855	2.798	2.743	2.690	2.639	2.589
5	3.696	3.605	3.517	3.433	3.352	3.274	3.199	3.127	3.058	2.991
6	4.231	4.111	3.998	3.889	3.784	3.685	3.589	3.498	3.410	3.326
7	4.712	4.564	4.423	4.288	4.160	4.039	3.922	3.812	3.706	3.605
8	5.146	4.968	4.799	4.639	4.487	4.344	4.207	4.078	3.954	3.837
9	5.537	5.328	5.132	4.946	4.772	4.607	4.451	4.303	4.163	4.031
10	5.889	5.650	5.426	5.216	5.019	4.833	4.659	4.494	4.339	4.192
11	6.207	5.938	5.687	5.453	5.234	5.029	4.836	4.656	4.486	4.327
12	6.492	6.194	5.918	5.660	5.421	5.197	4.988	4.793	4.611	4.439
13	6.750	6.424	6.122	5.842	5.583	5.342	5.118	4.910	4.715	4.533
14	6.982	6.628	6.302	6.002	5.724	5.468	5.229	5.008	4.802	4.611
15	7.191	6.811	6.462	6.142	5.847	5.575	5.324	5.092	4.876	4.675
16	7.379	6.974	6.604	6.265	5.954	5.668	5.405	5.162	4.938	4.730
17	7.549	7.120	6.729	6.373	6.047	5.749	5.475	5.222	4.990	4.775
18	7.702	7.250	6.840	6.467	6.128	5.818	5.534	5.273	5.033	4.812
19	7.839	7.366	6.938	6.550	6.198	5.877	5.584	5.316	5.070	4.843
20	7.963	7.469	7.025	6.623	6.259	5.929	5.628	5.353	5.101	4.870

FORMULAE

Annuity

Present value of an annuity of \$1 per annum, receivable or payable for n years, commencing in one year, discounted at $r\%$ per annum:

$$PV = \frac{1}{r} \left[1 - \frac{1}{[1+r]^n} \right]$$

Perpetuity

Present value of \$1 per annum, payable or receivable in perpetuity, commencing in one year, discounted at $r\%$ per annum:

$$PV = \frac{1}{r}$$

LIST OF VERBS USED IN THE QUESTION REQUIREMENTS

A list of the learning objectives and verbs that appear in the syllabus and in the question requirements for each question in this paper.

It is important that you answer the question according to the definition of the verb.

LEARNING OBJECTIVE	VERBS USED	DEFINITION
Level 1 - KNOWLEDGE What you are expected to know.	List State Define	Make a list of Express, fully or clearly, the details/facts of Give the exact meaning of
Level 2 - COMPREHENSION What you are expected to understand.	Describe Distinguish Explain Identify Illustrate	Communicate the key features Highlight the differences between Make clear or intelligible/State the meaning or purpose of Recognise, establish or select after consideration Use an example to describe or explain something
Level 3 - APPLICATION How you are expected to apply your knowledge.	Apply Calculate Demonstrate Prepare Reconcile Solve Tabulate	Put to practical use Ascertain or reckon mathematically Prove with certainty or to exhibit by practical means Make or get ready for use Make or prove consistent/compatible Find an answer to Arrange in a table
Level 4 - ANALYSIS How are you expected to analyse the detail of what you have learned.	Analyse Categorise Compare and contrast Construct Discuss Interpret Prioritise Produce	Examine in detail the structure of Place into a defined class or division Show the similarities and/or differences between Build up or compile Examine in detail by argument Translate into intelligible or familiar terms Place in order of priority or sequence for action Create or bring into existence
Level 5 - EVALUATION How are you expected to use your learning to evaluate, make decisions or recommendations.	Advise Evaluate Recommend	Counsel, inform or notify Appraise or assess the value of Advise on a course of action

Financial Pillar

Operational Level Paper

F1 – Financial Operations

May 2011

Thursday Morning Session