CIMA

Financial Management Pillar

Managerial Level Paper

P7 – Financial Accounting and Tax Principles

22 May 2008 – Thursday Afternoon 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). The requirements for the questions in Sections B and C are highlighted in a dotted box.
ALL answers must be written in the answer book. Answers or notes written on the question paper will **not** be submitted for marking.
Answer the ONE compulsory question in Section A. This has 15 sub-questions on pages 2 to 6.
Answer the SIX compulsory sub-questions in Section B on pages 8 to 11.
Answer the ONE compulsory question in Section C on pages 12 to 15. The question requirement is on page 15, which is detachable for ease of reference.
Maths Tables and Formulae are provided on pages 17 to 19. These pages are detachable for ease of reference.
The list of verbs as published in the syllabus is given for reference on the inside back cover of this question paper.
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 which questions you have answered.

P7 – Financial Accounting and Tax Principles

TURN OVER

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SECTION A – 40 MARKS

[the indicative time for answering this Section is 72 minutes]

ANSWER *ALL* FIFTEEN SUB-QUESTIONS

Instructions for answering Section A:

The answers to the fifteen sub-questions in Section A must 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.

For sub-questions **1.9**, **1.10**, **1.11**, **1.12**, **1.14** and **1.15** you should show your workings as marks are available for the method you use to answer these sub-questions.

Question One

1.1 Which ONE of the following statements about an overdraft facility is correct?

A An overdraft is a permanent loan.

B Assets are always required as security.

C Interest is paid on the full facility.

D Compared with other types of loan it is quick and easy to set up.

(2 marks)

1.2 What is “Hypothecation”?

A Process of earmarking tax revenues for specific types of expenditure.

B Estimation of tax revenue made by the tax authorities for budget purposes.

C Refund made by tax authorities for tax paid in other countries.

D Payment of taxes due to tax authorities, net of tax refunds due from tax authorities.

(2 marks)

1.3 Which ONE of the following is correct?

A cash budget prepared on a monthly basis is done to calculate

A the amount of inventory to purchase in the following month.

B when to pay workers' wages.

C next month's sales volumes.

D whether there will be sufficient cash in the bank to meet requirements.

(2 marks)

1.4 Which ONE of the powers listed below is **unlikely** to be granted to the auditor by legislation?

A The right of access at all times to the books, records, documents and accounts of the entity.

B The right to be notified of, attend, and speak at meetings of equity holders.

C The right to correct financial statements if the auditor believes the statements do not show a true and fair view.

D The right to require officers of the entity to provide whatever information and explanations thought necessary for the performance of the duties of the auditor.

(2 marks)

1.5 Which ONE of the following statements would be correct when an independent auditor's report gives an **adverse** opinion?

A The effect of the disagreement with management is so pervasive that the financial statements are misleading and, in the opinion of the auditor, do not give a true and fair view.

B A disagreement with management over material items needs to be highlighted using an "except for" statement.

C An opinion cannot be given because insufficient information or access to records has been given to the auditor.

D A disagreement with management over material items means that an unqualified report must be issued.

(2 marks)

Section A continues on the next page

TURN OVER

1.6 Where a resident entity runs an overseas operation as a branch of the entity, certain tax implications arise.

Which ONE of the following does **not** usually apply in relation to an overseas branch?

A Assets can be transferred to the branch without triggering a capital gain.

B Corporate income tax is paid on profits remitted by the branch.

C Tax depreciation can be claimed on any qualifying assets used in the trade of the branch.

D Losses sustained by the branch are immediately deductible against the resident entity's income.

(2 marks)

1.7 The "tax gap" is the difference between

A when a tax payment is due and the date it is actually paid.

B the tax due calculated by the entity and the tax demanded by the tax authority.

C the amount of tax due to be paid and the amount actually collected.

D the date when the entity was notified by the tax authority of the tax due and the date the tax should be paid.

(2 marks)

1.8 Which of the following are functions of the International Accounting Standards Committee Foundation?

(i) Issuing International Accounting Standards

(ii) Approving the annual budget of the International Accounting Standards Committee (IASC) and its committees

(iii) Enforcing International Accounting Standards

(iv) Reviewing the strategy of the IASC

(v) Publishing an annual report on the activities of the IASC and IASB

A (i), (ii) and (v)

B (ii) and (iv)

C (i), (iii) and (v)

D (ii), (iv) and (v)

(2 marks)

1.9 FD purchased an item of plant and machinery costing $600,000 on 1 April 2005, which qualified for 50% capital allowances in the first year and 25% per year thereafter, on the reducing balance basis.

FD's policy in respect of plant and machinery is to charge depreciation on a straight line basis over five years, with no residual value.

On 1 April 2007, FD carried out an impairment review of all its non-current assets. This item of plant and machinery was found to have a value in use of $240,000. FD adjusted its financial records and wrote the plant and machinery down to its value in use on 1 April 2007.

Assuming there are no other temporary differences in the period and a tax rate of 25% per annum over the five years, calculate the amount of any deferred tax balances outstanding at 31 March 2007 and 31 March 2008. (Work to the nearest $1,000)

(4 marks)

1.10

FR Income statement for the year ended 31 March 2008

	$000
Revenue	270
Cost of goods sold	139
Gross profit	131

Assume all sales and all purchases are on credit and that there are no returns or discounts. All trade payables relate to cost of sales.

FR Balance sheet at 31 March 2008 (Extract)

Current assets	*$000*	*$000*
Inventory	79	
Trade receivables	52	
Cash	25	
		156
Current liabilities		
Trade payables	40	
Accrued interest	21	
Income tax	88	
		149

Inventory balance at 31 March 2007 was $79,000.

Calculate the number of days in FR's working capital cycle.

(4 marks)

1.11 FW holds a 91 day treasury bill, with a face value of $10,000. FW wants to sell the treasury bill, which has 40 days remaining to maturity.

The market yield for treasury bills is 6%.

Calculate the expected selling price of the treasury bill. (Assume 365 days in a year for interest calculation purposes.)

(3 marks)

Section A continues on the next page

TURN OVER

1.12 Country Z has a VAT system which allows entities to reclaim input tax paid.

In Country Z, the VAT rates are:

Zero rated	0%
Standard rated	15%

FE owns and runs a small retail store. The store's sales include items that are zero rated, standard rated and exempt.

FE's electronic cash register provides an analysis of sales. The figures for the three months to 30 April 2008 were:

	Sales value, including VAT where appropriate
	$
Zero rated	13,000
Standard rated	18,400
Exempt	11,000
Total	42,400

FE's analysis of expenditure for the same period provided the following:

	Expenditure, excluding VAT
	$
Zero rated purchases	6,000
Standard rated purchases relating to standard rate outputs	10,000
Standard rated purchases relating to zero rate outputs	4,000
Standard rated purchases relating to exempt outputs	5,000
	25,000

Calculate the VAT due to/from FE for the three months ended 30 April 2008.

(3 marks)

1.13 State TWO reasons why a group of entities might want to claim group loss relief rather than use the loss in the entity to which it relates. (Group loss relief is where, for tax purposes, the loss for the year of one entity in the group is offset against the profit of the year of one or more other entities in the group.)

(2 marks)

1.14 A $1,000 bond has a coupon rate of 12% and will repay its face value on redemption in four years' time.

If the bond is purchased for $1,090 ex interest and held, what is its yield to maturity?

(4 marks)

1.15 FJ commenced business on 1 April 2008. Sales in April 2008 were $60,000. This is forecast to increase by 2% per month.

Credit sales accounted for 50% of sales. Credit sales customers are allowed one month to pay; 75% of April credit customers paid on time. A further 20% are expected to pay after more than one month, but before two months. The remaining 5% are not expected to pay. All these percentages are expected to continue in the near future.

Calculate the total amount of cash FJ should forecast to be received in June 2008.

(4 marks)

(Total for Question One = 40 marks)

Reminder

All answers to Section A must be written in your answer book.

Answers to Section A written on the question paper will **not** be submitted for marking.

End of Section A

Section B starts on page 8

TURN OVER

SECTION B – 30 MARKS

[the indicative time for this Section is 54 minutes]

ANSWER *ALL* SIX SUB-QUESTIONS. EACH SUB-QUESTION IS WORTH 5 MARKS.

Question Two

(a)

EK publishes various types of book and occasionally produces films which it sells to major film distributors.

(i) On 31 March 2007, EK acquired book publishing and film rights to the next book to be written by an internationally acclaimed author, for $1 million. The author has not yet started writing the book, but expects to complete it in 2009.

(ii) Between 1 June and 31 July 2007, EK spent $500,000 exhibiting its range of products at a major international trade fair. This was the first time EK had attended this type of event. No new orders were taken as a direct result of the event, although EK directors claim to have made valuable contacts that should generate additional sales or additional funding for films in the future. No estimate can be made of additional revenue at present.

(iii) During the year, EK employed an external consultant to redesign EK's corporate logo and to create advertising material to improve EK's corporate image. The total cost of the consultancy was $800,000.

EK's directors want to treat all of the above items of expenditure as assets.

Required:

Explain how EK should treat these items of expenditure in its financial statements for the year ended 31 October 2007 with reference to the International Accounting Standards Board's (IASB) *Framework for the Preparation and Presentation of Financial Statements (Framework)* and relevant International Financial Reporting Standards.

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

(b) The following financial information relates to FC for the year ended 31 March 2008.

Income statement for the year ended 31 March 2008

	$000
Revenue	445
Cost of sales	(220)
Gross profit	225
Other income	105
	330
Administrative expense	(177)
	153
Finance costs	(20)
Profit before tax	133
Income tax expense	(43)
Profit	90

The following administrative expenses were incurred in the year:

	$000
Wages	70
Other general expenses	15
Depreciation	92
	177

Other income:	
Rentals received	45
Gain on disposal of non-current assets	60
	105

Balance sheet extracts at:

	31 March 2008	*31 March 2007*
	$000	*$000*
Inventories	40	25
Trade receivables	50	45
Trade payables	(30)	(20)

Required:

Prepare FC's cash flow statement for the year ended 31 March 2008, down to the line "Cash generated from operations", using the **direct** method.

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

Section B continues on the next page

TURN OVER

(c) FG issued 10,000,000 $1, 5% preferred shares at par on 1 May 2006. The shares are redeemable at a 10% premium four years after issue on 30 April 2010. Issue costs were $601,500.

Required:

(i) Calculate the finance charge for EACH of the four years 1 May 2006 to 30 April 2010 using the **sum of digits** method.

(3 marks)

(ii) Prepare extracts from FG's income statement for the year ended 30 April 2008 and its balance sheet at that date, to show the accounting entries required for the preferred shares.

(2 marks)

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

(d)

Required:

Explain the possible benefits and limitations of a Just-In-Time (JIT) purchasing system.

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

(e)

Required:

The International Accounting Standards Board's (IASB) *Framework for the Preparation and Presentation of Financial Statements (Framework)* defines the elements of financial statements.

Explain EACH of the elements, illustrating each with an example.

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

(f) Country X has the following tax regulations in force.

- The tax year is 1 May to 30 April;
- All corporate profits are taxed at 20%;
- When calculating corporate taxable income, depreciation of non-current assets cannot be charged against taxable income.
- Tax depreciation is allowed at the following rates:
  - o Buildings at 5% per annum on straight line basis;
  - o All other non-current tangible assets are allowed tax depreciation at 25% per annum on a reducing balance basis;
- No tax allowances are allowed on land or furniture and fittings.

FB commenced trading on 1 May 2005 when it purchased all its non-current assets.

FB's non-current asset balances were:

	Cost	*Net book value*	*Tax written down value*
	1 May 2005	*1 Mayl 2007*	*1 May 2007*
	$	*$*	*$*
Land	20,000	20,000	-
Buildings	80,000	73,600	72,000
Plant and equipment	21,000	1,000	11,812
Furniture and fittings	15,000	5,000	-

FB did not purchase any non-current assets between 1 May 2005 and 30 April 2007. On 2 May 2007, FB disposed of all its plant and equipment for $5,000 and purchased new plant and equipment for $30,000. The new plant and equipment qualified for a first year tax allowance of 50%.

FB's Income statement for the year ended 30 April 2008

	$
Gross profit	210,000
Administrative expenses	(114,000)
Gain on disposal of plant and equipment	4,000
Depreciation – furniture and fittings	(5,000)
Depreciation – buildings	(3,200)
Depreciation – plant and equipment	(6,000)
Distribution costs	(49,000)
	36,800
Finance cost	(7,000)
Profit before tax	29,800

Required:

Calculate FB's corporate income tax due for the year ended 30 April 2008.

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

(Total for Question Two = 30 marks)

End of Section B. Section C starts on page 12

TURN OVER

SECTION C – 30 MARKS

[the indicative time for this Section is 54 minutes]

ANSWER THIS QUESTION. THE QUESTION REQUIREMENTS ARE ON PAGE 15, WHICH IS DETACHABLE FOR EASE OF REFERENCE

Question Three

FZ is an entity which owns a number of factories that specialise in packaging and selling fresh dairy products in bulk to wholesale entities and large supermarkets. FZ also owns a chain of small newsagents' shops.

At its meeting on 1 January 2008, the Board of FZ decided that, to maximise its strategic opportunities, it would sell the newsagents' shops and concentrate on its dairy product business.

FZ's trial balance at 31 March 2008 is shown below:

	Notes	*$000*	*$000*
5% Loan notes (redeemable 2020)			1,000
Administrative expenses		440	
Cash and cash equivalents		853	
Cash received on disposal of vehicles			15
Cost of goods sold		4,120	
Distribution costs		432	
Equity dividend paid		500	
Factory buildings at valuation		12,000	
Goodwill		300	
Inventory at 31 March 2008		900	
Newsagents shops at cost		6,200	
Ordinary shares $1 each, fully paid at 31 March 2008			5,000
Plant and equipment		2,313	
Provision for deferred tax at 31 March 2007			197
Provision for property, plant and equipment depreciation at 31 March 2007	(iii)		3,337
Retained earnings at 31 March 2007			5,808
Revaluation reserve			190
Sales revenue			10,170
Share premium at 31 March 2008			3,000
Trade payables			417
Trade receivables		929	
Vehicles at cost		147	
		29,134	29,134

Notes:

(i) The newsagents' shops were valued at $5,000,000 by a qualified external valuer on 1 January 2008. On the same date, a prospective buyer expressed an interest at that price. At 31 March 2008, detailed negotiations were continuing, with the sale expected to be concluded by 31 July 2008, for the full valuation of $5,000,000.

The net book values (all included in the relevant figures in the trial balance) of the assets relating to the newsagents' shops at 1 January 2008, before revaluation, were:

	$000
Goodwill	300
Newsagents' shops	4,960
	5,260

The newsagents' shops are regarded as a cash generating unit. The cost of selling the shops is estimated at $200,000.

The revenue and expenses of the newsagents' shops for the year ended 31 March 2008, all included in the trial balance figures, were as follows:

	$000
Revenue	772
Cost of sales	580
Administrative expenses	96
Distribution costs	57

The sale agreement provides for all employee contracts to be transferred to the new owners of the shops.

Loan note interest does not relate to newsagents shops.

(ii) At their meeting on 1 February 2008, the directors of FZ agreed a $2,000,000 reorganisation package for all of FZ, excluding the newsagents' shops. The restructuring was announced to the staff on 16 February 2008. It was scheduled to begin implementation on 1 June 2008 and to be completed by 31 December 2008. The reorganisation package covered staff retraining, staff relocation and development of new computer systems.

(iii) Property, plant and equipment depreciation at 31 March 2007 comprised:

	$000
Factory buildings	720
Plant and equipment	1,310
Vehicles	67
Newsagents shops	1,240

(iv) On 1 May 2008, FZ was informed that one of its customers, X, had ceased trading. The liquidators advised FZ that it was very unlikely to receive payment of any of the $62,000 due from X at 31 March 2008.

(v) The taxation due for the year ended 31 March 2008 is estimated at $920,000 (net of tax credit for newsagents' shops of $120,000) and the deferred tax provision needs to be increased to $237,000, (all relating to continuing activities).

(vi) Depreciation is to be charged on non-current assets as follows:

- Factory buildings, straight line basis at 3%;
- Plant and equipment, straight line basis at 20%;
- Newsagents' shops, straight line basis at 10%.

These items of depreciation are regarded as a cost of sales.

- Vehicles, reducing balance at 25%.

This depreciation is regarded as a distribution cost.

FZ provides a full year's depreciation in the year of purchase and no depreciation in the year of sale.

(vii) During the year, FZ disposed of old vehicles for $15,000. The original cost of these vehicles was $57,000 and accumulated depreciation at 31 March 2007 was $52,000.

(viii) The revaluation reserve arose when the factory buildings were revalued in 2005.

(ix) During the year, FZ raised new capital by making a rights issue of 1,000,000 $1 equity shares at $1·50 each. All rights were taken up and all amounts are included in the trial balance.

(x) The 5% loan notes were issued in 2000.

(xi) FZ wants to disclose the minimum information allowed by IFRS in its primary financial statements.

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Question Three

Required:

(a) Explain, with reasons, how items (i) and (ii) above should be treated in FZ's financial statements for the year ended 31 March 2008.

(5 marks)

(b) Prepare FZ's income statement and a statement of changes in equity for the year to 31 March 2008 and a balance sheet at that date, in a form suitable for presentation to the shareholders and in accordance with the requirements of International Financial Reporting Standards.

(25 marks)

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 = 30 marks)

(Total for Section C = 30 marks)

End of Question Paper

Maths Tables and Formulae are on pages 17-19

TURN OVER

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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	Interest rates (r)									
(n)	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	Interest rates (r)									
(n)	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	Interest rates (*r*)									
(*n*)	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	Interest rates (*r*)									
(*n*)	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	7.793	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

Valuation models

(i) Future value of *S*, of a sum *X*, invested for *n* periods, compounded at *r*% interest: $S = X[1 + r]^n$

(ii) Present value of $1 payable or receivable in *n* years, discounted at *r*% per annum:

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

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

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

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

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

(v) Present value of $1 per annum, receivable or payable, commencing in one year, growing in perpetuity at a constant rate of *g*% per annum, discounted at *r*% per annum:

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

Inventory management

(i) Economic Order Quantity

$$EOQ = \sqrt{\frac{2C_oD}{C_h}}$$

where: C_o = cost of placing an order
C_h = cost of holding one unit in Inventory for one year
D = annual demand

Cash management

(i) Optimal sale of securities, Baumol model:

$$\text{Optimal sale} = \sqrt{\frac{2 \times \text{Annual cash disbursements} \times \text{Cost per sale of securities}}{\text{interest rate}}}$$

(ii) Spread between upper and lower cash balance limits, Miller-Orr model:

$$\text{Spread} = 3\left[\frac{\frac{3}{4} \times \text{transaction cost} \times \text{variance of cash flows}}{\text{interest rate}}\right]^{\frac{1}{3}}$$

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

Financial Management Pillar

Managerial Level

P7 – Financial Accounting and Tax Principles

May 2008

Thursday Afternoon Session