

Chartered Secretaries Qualifying Scheme – Level 2

Financial Decision Making

Sample paper

Time allowed: 3 hours and 15 minutes
(including reading time)

Do not open this examination paper until the presiding officer or an invigilator tells you to.

You must not take this paper out of the examination room.

The examination paper contains **six** questions. Each question carries 25 marks. You must attempt **four questions only**.

Questions

(Answer **four** questions from this paper)

1. Ibrox plc ('Ibrox') is a manufacturer of electronic surveillance equipment. The company has an active research and development programme and has recently developed a closed-circuit television camera with night vision. The camera, which was developed at a cost of £8.4 million, is designed to enable businesses and other organisations to monitor their premises more effectively. Ibrox commissioned a market survey, at a cost of £0.8 million, to assess likely demand for the new camera. The market survey report has recently been submitted and reveals that the camera project is likely to have a life of four years. It is estimated that 9,000 cameras per year will be sold throughout the life of the project and that potential customers will accept a selling price of £2,500 for each camera.

In order to manufacture the camera, equipment costing £11.5 million must be acquired immediately. This equipment will be depreciated evenly over the project's four-year life, and will be sold at the end of the project for an estimated £3.5 million. Total manufacturing, marketing and distribution costs are estimated at £25.5 million per year. This includes depreciation for the equipment as well as an apportionment of £4.5 million per year, which is designed to represent a fair share of total head office costs.

Ibrox is financed by a mixture of equity and debt. The company's equity shares are listed on the London Stock Exchange and have a beta of 1.6. The market rate of return is 7% and the risk-free rate of return is 2%. The debt consists of 6% irredeemable loan notes, which are currently trading at a cost of £120 per £100 nominal. The company maintains a capital structure of 60% equity and 40% debt.

Required

Taxation should be ignored and workings should be in £ millions and to one decimal place.

- (a) Produce a schedule of net relevant cash flows and calculate the net present value of the camera project. (10 marks)
- (b) Prepare a briefing paper for a non-executive director on the benefits of sensitivity analysis in the current turbulent economic climate. As part of your briefing, undertake sensitivity analysis to show by how much each of the following would have to change before it becomes no longer worthwhile to produce the new camera:
- (i) The cost of the equipment.
 - (ii) The net annual operating cash flows. (9 marks)
- (c) Comment on the findings contained in your answers to (a) and (b), above, and identify any further information which may be useful before a final decision is made. (6 marks)

(Total: 25 marks)

2. Trafford plc ('Trafford') operates a large chain of pizza restaurants. In recent years, the company has expanded its operations and is seeking opportunities to expand further through a policy of acquisition. To this end, the directors of Trafford have identified Stamford plc ('Stamford'), which owns a chain of hamburger restaurants. The directors of Trafford believe that this restaurant chain would fit well within their existing business. Abridged financial statements for both companies appear below.

Statement of financial position as at 30 April 2010

	Trafford	Stamford
	£m	£m
ASSETS		
Non-current assets	66.5	38.2
Current assets	16.4	11.9
Total assets	<u>82.9</u>	<u>50.1</u>
EQUITY AND LIABILITIES		
£1 Ordinary shares	50.0	15.0
Retained earnings	10.4	8.6
	<u>60.4</u>	<u>23.6</u>
Non-current liabilities	13.0	14.0
Current liabilities	9.5	12.5
Total equity and liabilities	<u>82.9</u>	<u>50.1</u>

Income statement for the year ended 30 April 2010

	Trafford	Stamford
	£m	£m
Revenue	<u>182.4</u>	<u>104.7</u>
Operating profit	21.2	12.5
Interest payable	(0.6)	(0.8)
Profit before taxation	20.6	11.7
Tax	(4.1)	(2.5)
Profit for the period	<u>16.5</u>	<u>9.2</u>

The directors of Trafford wish to acquire Stamford using a share-for-share exchange. They have offered 2 shares in Trafford for every 3 shares held in Stamford.

The price/earnings ratio of Trafford is 16 times and for Stamford it is 9 times. The directors of Trafford believe that it is possible to achieve a price/earnings ratio of 15 times in the enlarged company by ensuring that the restaurants formerly owned by Stamford adopt more efficient practices and better marketing techniques. Annual, after-tax cost savings of £2.5 million per year are expected from the acquisition of Stamford.

Required

- (a) Calculate the total value of the proposed bid by Trafford and the expected earnings per share following a successful takeover of Stamford. (7 marks)
- (b) Assess the likely implications of a successful bid for the wealth of shareholders in Trafford and in Stamford and discuss any issues that are critical to this assessment. (10 marks)

(continued)

- (c) Explain, for a new non-executive director, the use of a share-for-share exchange as a means of bid consideration from the perspective of shareholders in both Trafford and in Stamford.

(8 marks)

(Total: 25 marks)

3. The efficiency of stock markets has important implications for managers. Where stock markets are efficient, managers must learn important lessons on how to manage their business.

Required

- (a) Explain what is meant by the term 'efficient markets' and outline the three major forms of market efficiency.

(7 marks)

- (b) Identify and discuss six important implications of market efficiency for managers.

(18 marks)

(Total: 25 marks)

4. Hampden plc ('Hampden') produces ready-cooked meals that are supplied to supermarkets and to airlines. Sales, which are all on credit, have been stable for the past three years at £180 million and are expected to remain at this level in future years. Hampden has recently appointed a new chief executive, who is concerned about its trade receivables' collection procedures. One area of concern is the time taken to dispatch statements to credit customers. The terms of credit require payment to be made within 30 days of receiving the statement. The chief executive instigated a study, which revealed that the time taken to dispatch statements to customers was currently as follows:

Statement dispatch times (days)	Percentage of credit customers issued with statements
7	30
8	30
9	20
10	20

The chief executive regards this as unacceptable and has asked the credit control manager to aim to send out 50% of statements after 2 days, 40% after 3 days and the remainder after 4 days. The credit control manager believes that this could only be achieved if an additional two, part-time, members of staff were recruited. While this may help Hampden to receive the money owed more quickly, it would result in an additional cost of £20,000 per year for each member of staff.

The chief executive is also concerned about the time taken to collect the amounts due from credit customers and its impact on Hampden's cash flow. She is considering whether debt factoring or invoice discounting would be appropriate for the company. At the moment, Hampden has a large bank overdraft and the bank has asked for this to be reduced. The chief executive is, therefore, looking for ways in which this might be achieved. Interest on the overdraft is at the rate of 10% per year.

(continued)

Required

- (a) Prepare the business case for improving statement dispatch times by employing new staff, and state whether two new members of staff should be employed for this purpose.

(9 marks)

- (b) Compare the main features of debt factoring and invoice discounting and suggest possible reasons why invoice discounting is a more popular form of asset-based finance than debt factoring.

(16 marks)

(Total: 25 marks)

5. Maine plc is a large retail chain that is quoted on the London Stock Exchange. The company has 80 million shares in issues, which are currently trading at £8.50 per share. The most recent income statement of the company is as follows:

Income statement for the year ended 30 April 2010

	£m
Revenue	485.2
Operating profit	65.5
Interest charges	(12.6)
Profit before taxation	52.9
Tax	(10.9)
Profit for the year	42.0

The directors of the company have recently decided to expand the business by opening a number of new outlets in France. To finance this expansion, a 1-for-4 rights issue will be made at a discount of 40% on the current share price.

Required

- (a) Calculate the theoretical ex-rights price per share and the value of the rights per existing share.

(5 marks)

- (b) With regard to the rights issue, evaluate each of the options available to a shareholder owning 10,000 shares in Maine plc.

(6 marks)

- (c) Calculate the market value per share following the rights issue, if the expansion strategy leads to an increase in after-tax profits of £4.6 million and to an increase in the price/earnings ratio of 20%.

(6 marks)

- (d) Prepare a briefing paper for a non-executive director, setting out possible reasons why rights issues are a popular form of share issue and discuss how critical the pricing of shares is to the success of the issue.

(8 marks)

(Total: 25 marks)

6. Upton plc ('Upton') provides refuse disposal services for a large number of city councils. The company has been trading for five years and is currently owned by a large conglomerate. It has recently been decided to demerge the company and for Upton then to seek a listing on a leading stock market. The directors of Upton are currently preparing for the listing and are debating an appropriate dividend policy for the demerged company. Some directors take the view that the dividend policy adopted is critical to the success of the listing, whereas other directors believe that it is not important as the pattern of dividends has no effect on shareholder wealth.

Required

- (a) Critically appraise the conflicting views of the directors and provide reasons why, in practice, the pattern of dividends is normally considered to be important.
(15 marks)
- (b) Assuming that the business decides to pay dividends, identify and discuss five factors influencing the amount of dividends that it may decide to pay.
(10 marks)

(Total: 25 marks)

The scenarios included here are entirely fictional. Any resemblance of the information in the scenarios to real persons or organisations, actual or perceived, is purely coincidental.

Annuity Table

Present value (in £) of a series of n equal annual payments of £1 a year, starting one year from now, discounted at a rate of r% per annum

		Discount rate (r)									
Years (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	1.739	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	10.37	9.787	9.253	8.760	8.306	7.887	7.499	7.139	6.805	6.495	
12	11.26	10.58	9.954	9.385	8.863	8.384	7.943	7.536	7.161	6.814	
13	12.13	11.35	10.63	9.986	9.394	8.853	8.358	7.904	7.487	7.103	
14	13.00	12.11	11.30	10.56	9.899	9.295	8.745	8.244	7.786	7.367	
15	13.87	12.85	11.94	11.12	10.38	9.712	9.108	8.559	8.061	7.606	
	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	4.567	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	

Present Value Table

Present value (in £) of a single payment of £1, n years from now, discounted at a rate of r% per annum

Years (n)	Discount rate (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	0.702	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
	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	0.074	0.065

