

UNIVERSITY OF BOLTON
INSTITUTE OF MANAGEMENT
ACCOUNTANCY

SEMESTER 2 2018/19
EXAMINATIONS

FINANCIAL MANAGEMENT

MODULE NO: ACC6003

Date: Tuesday 21 May 2019

Time: 10.00 – 1.00

INSTRUCTIONS TO CANDIDATES:

There are 5 questions in this examination 4 questions to be answered as follows:

Answer **ALL** 3 questions in section A

Answer **ONLY** 1 question from section B

This is a closed book examination.

You must hand in this exam paper with your answer booklet.

(Discount tables and Formulae are attached at the back of this question paper)

Bolton Institute of Management
 Accountancy
 Semester 2 Examination 2018/2019
 Financial Management
 Module No. ACC6003

SECTION A – ANSWER ALL 3 QUESTIONS FROM THIS SECTION

Question 1

Starling plc are considering a major investment in new plant and equipment. To assist the management team to make the correct decision the accountant has been asked to calculate the companies weighted average cost of capital. The following information has been extracted from Starling plc s latest balance sheet

	£ 000 s
800,000 Ordinary Shares of £ 1.00 each	800
400,000 Preference Shares of £ 1.00 each	400
5 % Debenture Loan Stock	200
Bank Loan	500

Interest on the Debenture loan stock is payable at the end of Year 1, Year 2, Year 3, Year 4 and Year 5. The Debenture loan stock is to be redeemed in cash at a 20 % premium at the end of five years. The Debenture loan stock is currently trading at a value of £90 (per £100 nominal).

The ex -dividend market value of the ordinary shares is £3.00. The dividend paid to ordinary shareholders was 40 pence and It is expected that future dividends will grow at a rate of 6 % per annum.

There are 400,000 preference shares (non–redeemable or convertible) at a nominal value of £ 1 per share. The market value of the preference shares is 80 pence and the annual net dividend of 10 % and has just been paid to shareholders.

The interest charge on the Bank Loan is 3% above the Bank of England’s base rate, which currently is at 7%.

Corporation tax is expected to be charged at 20 % per annum from profits generated from the company.

Required:

- (a) Calculate the weighted average after tax-cost of capital of Starling plc. (12 marks)
- (b) Explain the significance of the request from the management team to calculate the company’s “Weighted Average Cost Capital” prior to making a decision with regard to the proposed investment. (8 marks)
- (c) Evaluate risk in relation to the Capital Asset Pricing Model (5 marks)

(Total 25 Marks)

Bolton Institute of Management
 Accountancy
 Semester 2 Examination 2018/2019
 Financial Management
 Module No. ACC6003

CONTINUED OVER THE PAGE, PLEASE TURN OVER

Question 2

Sparrow plc is in the mobile phone industry and is considering launching a new product which improves wi fi connectivity. The required investment in new technology will be £1 million, which it expects to be out of date in four years. Marketing and promotion costs for the new product are estimated to be £ 400,000 in the first year and £80,000 per annum for years 2,3, and 4. The Management Team have agreed that the new product will be priced at £100 in Year 1 with prices increasing by 5 % for years 2,3, and 4. Estimated data is as follows:

Year	1	2	3	4
Sales and Production (units)	31,000	32,000	33,000	34,000

The Management Accountant and Production Manager have agreed the following cost profiles for the first year of production and sales (Year 1):

Direct Material Cost	£ 40.00 per item
Other Variable Production Cost	£ 25.00 per item
Fixed Costs	£600,000 per annum

To be prudent the Management Accountant has suggested that the company should anticipate production costs to increase by 4 % per annum for years 2,3, and 4. The company has taken some specialist tax advice and has been advised that with regard to the investment cost, Sparrow plc will be able to claim capital allowances on a reducing balance basis at a rate of 25%. In addition, the tax specialist has advised the company to anticipate corporation tax liability on any profits to be 20% per year and to settle any tax liability in the year in which they arise. The Management Accountant has recommended that an after tax discount rate of 12 % should be used when appraising new capital investments.

Required:

- Calculate the net present value of the proposed investment and comment on your findings. Your comments should be supported by workings and include any reservations that you might have. (12 marks)
- Calculate the internal rate of return of the proposed investment and comment on your findings. (5 marks)
- Evaluate other "Investment Appraisal Techniques" that Sparrow plc could have adopted. (8 marks)

(Total 25 marks)

Bolton Institute of Management
 Accountancy
 Semester 2 Examination 2018/2019
 Financial Management
 Module No. ACC6003

CONTINUED OVER THE PAGE, PLEASE TURN OVER

Question 3

The Directors of Heron plc are considering the possibility of obtaining a listing for the company's shares on the "Stock Exchange". The following information is available.

Income Statement for the Year Ended 31 March 2018

	£ Million
Turnover	42.2
Cost of Sales	<u>(36.5)</u>
Profit before interest and taxation	5.7
Interest	<u>(1.5)</u>
Profit before Taxation	4.2
Taxation	<u>(0.8)</u>
Profit attributable to ordinary shareholders	3.4
Dividends	<u>(0.3)</u>
Retained Profit	3.1

Statement of Financial Position as at 31 March 2018

	£ Million	£ Million
Non-current assets (at cost less accumulated depreciation)		
Land and Building's		4.4
Plant and Machinery		<u>9.9</u>
		14.3
Current Assets		
Inventories	4.8	
Accounts Receivable	6.2	
Cash at Banks	<u>2.5</u>	
		<u>13.5</u>
		<u>27.8</u>
Ordinary Shares £1		4.0
Reserves		10.0
Debentures		2.0
Current Liabilities		
Trade accounts payable	8.2	
Bank overdraft	<u>3.6</u>	
		<u>11.8</u>
		<u>26.8</u>

Question 3 continued over the page

Bolton Institute of Management
Accountancy
Semester 2 Examination 2018/2019
Financial Management
Module No. ACC6003

Question 3 Continued

Average performance ratios for the industry sector in which Heron plc operates are given below:

Return before interest and tax on long-term capital employed	25%
Return after tax on equity	18%
Operating profit as a percentage of sales	12%
Current Ratio	2: 1
Quick (acid test) ratio	1: 1
Total debt-equity (gearing)	24%
Dividend Cover	5
Interest Cover	5

Required:

- (a) Evaluate the financial state and performance of Heron plc by comparing it with the industry sector it operates in. (12 marks)
- (b) Evaluate the benefits of a Stock Exchange listing. (5 marks)
- (c) Advise Heron plc how it could improve its financial position to make itself more attractive to future investors. (8 marks)
- (Total 25 marks)**

END OF SECTION A

CONTINUED OVER THE PAGE, PLEASE TURN OVER

Bolton Institute of Management
 Accountancy
 Semester 2 Examination 2018/2019
 Financial Management
 Module No. ACC6003

SECTION B – ANSWER 1 QUESTION ONLY FROM THIS SECTION

Question 4

Falcon plc is a major producer of motor parts that opened a distribution centre in Thailand four years ago. The venture was not a total success, so the Management Team have decided to withdraw from Thailand. To raise the finance required to withdraw from Thailand the Management Team have decided to make a one-for-five rights issue at a discount of 25 % on the current market value of the shares. The most recent income statement of the business is as follows.

<u>Income statement for the year ended 31 March 2018</u>		£ m
Sales		<u>1,500.00</u>
Net profit before interest and taxation		60.0
Interest payable		<u>28.0</u>
Net profit before taxation		32.0
Company Tax		<u>8.0</u>
Net profit after taxation		24.0
Ordinary dividends payable		<u>12.0</u>
Accumulated profit		<u>12.0</u>

<u>The capital and reserves of the business as at 31 March 2018</u>		£ m
£ 0.25 ordinary shares		80.0
Revaluation reserve		120.0
Accumulated profits		<u>300.0</u>
		<u>500.0</u>

The shares of the business are currently trading on the Stock Exchange at a P/E ratio of 14 times. An investor owning 12,000 shares in the business has received information of the forthcoming rights issue but cannot decide whether to take up the rights issue, sell the rights or allow the rights offer to lapse.

Required:

- (a) Calculate the theoretical ex-rights price of an ordinary share in Falcon plc. (5 marks)
- (b) Calculate the price at which the rights in Falcon plc are likely to be traded. (5 marks)
- (c) Evaluate each of the options available to the investor with 12,000 shares. (5 marks)
- (d) Discuss, from the viewpoint of the business, how critical the pricing of a rights issue is likely to be and explain why this method of raising finance is preferable to obtaining a bank loan. (10 marks)

(Total 25 marks)

CONTINUED OVER THE PAGE, PLEASE TURN OVER

Bolton Institute of Management
Accountancy
Semester 2 Examination 2018/2019
Financial Management
Module No. ACC6003

Question 5

Parrot plc is an importer / exporter of Televisions. It is based in the United Kingdom but trades with Vietnam. Parrot plc is about to invoice a customer based in Ho Chi Min City, Vietnam for \$900,000 payable in three months' time. Parrot plc's accountant is considering two methods of hedging the exchange risk. These are:

Method 1: Borrow dollars now, converting the loan into sterling and repaying the dollar loan from the expected receipt in three months' time.

Method 2: Enter into a 3-month forward exchange contract with the company's bank to sell \$ 900,000.

The spot rate of exchange is US\$ 1.5942 to £1. The 3-month forward rate of exchange is US \$ 1.5766. The annual interest for borrowing in Vietnam is 6% and for investing in the United Kingdom is 8%.

Required:

(a) Advise Parrot plc's accountant on:

- (i) Which of the two methods is most advantageous to Parrot plc
- (ii) The factors to consider before deciding whether to hedge the risk using the foreign currency markets.

(10 marks)

(b) Explain the causes of exchange rate fluctuations.

(6 marks)

(c) Advise the accountant on other methods to hedge exchange rate risk.

(9 marks)

(Total 25 marks)

Bolton Institute of Management
 Accountancy
 Semester 2 Examination 2018/2019
 Financial Management
 Module No. ACC6003

END OF QUESTION PAPER

Present Value Table

Present value of 1 i.e. $(1 + r)^{-n}$

Where r = discount rate and n = number of periods until payment

Periods (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	0.856	0.840	0.824
3	0.971	0.942	0.915	0.889	0.864	0.840	0.816	0.793	0.771	0.750
4	0.961	0.924	0.888	0.853	0.820	0.789	0.760	0.732	0.705	0.680
5	0.951	0.906	0.863	0.822	0.783	0.747	0.713	0.681	0.651	0.622
6	0.942	0.888	0.837	0.790	0.746	0.704	0.664	0.626	0.590	0.556
7	0.933	0.871	0.813	0.760	0.710	0.662	0.620	0.580	0.542	0.507
8	0.923	0.853	0.789	0.731	0.677	0.626	0.580	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	0.506	0.460	0.420	0.386
11	0.896	0.804	0.722	0.650	0.583	0.523	0.470	0.420	0.380	0.350
12	0.887	0.788	0.701	0.625	0.553	0.490	0.440	0.390	0.350	0.319
13	0.879	0.773	0.681	0.601	0.524	0.456	0.410	0.360	0.320	0.290
14	0.870	0.758	0.661	0.577	0.500	0.430	0.380	0.340	0.290	0.260
15	0.861	0.743	0.641	0.553	0.475	0.410	0.360	0.310	0.270	0.239

Bolton Institute of Management
 Accountancy
 Semester 2 Examination 2018/2019
 Financial Management
 Module No. ACC6003

(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	0.594	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

PAST EXAMINATION

Bolton Institute of Management
Accountancy
Semester 2 Examination 2018/2019
Financial Management
Module No. ACC6003

FORMULAE

Capital Asset Pricing Model =

$$(K_e) = K_{rf} + \text{Beta} (K_m - K_{rf})$$

Gordon's Growth Model =

$$\frac{\text{Dividend plus Growth}}{\text{Market Value Of Share}} \times 100 + \text{Growth}$$

Preference Shares =

$$\frac{\text{Dividend Payable}}{\text{Market Value (Ex Div.)}} \times 100$$

Bank Loan =

$$\text{Interest Payable less Tax}$$

Irredeemable Debt

$$\frac{\text{Interest Payable less tax}}{\text{Market Value of Debt}} \times 100$$

Redeemable Debt =

Internal Rate of Return =

$$\text{Positive Discount Rate} + \frac{\text{Pos NPV}}{\text{Pos NPV} + \text{Neg NPV}} + \frac{\text{Diff in Disc Rates}}{\text{Pos NPV} + \text{Neg NPV}}$$

(ignore negative sign)

Bolton Institute of Management
Accountancy
Semester 2 Examination 2018/2019
Financial Management
Module No. ACC6003

Note the above is not an exhaustive list of formulae.

PAST EXAMINATION PAPER

