UNIVERSITY OF BOLTON INSTITUTE OF MANAGEMENT BA (HONS) ACCOUNTANCY SEMESTER 1 EXAMINATIONS 2022/2023

FINANCIAL MANAGEMENT

MODULE NO. ACC6003

Date: Monday 9 January 2023 Time: 10.00 – 1.00pm

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)

SECTION A - ANSWER ALL THREE QUESTIONS

Question 1

Chartwell Plc is a UK based company who is an international manufacturer of products. The company is considering the launch of three new products next year. The Managing Director as asked you to conduct a sensitivity analysis using Net Present Value to calculate the expected return based on various levels market demand respective to the product quality.

The following financial information is available:

| | | Standard Product | Luxury Product | Premium Product |
|--------|---------------------|---------------------|----------------|--------------------|
| Year 0 | Investment | \$1,100,000 | \$1,300,000 | \$1,700,000 |
| Year 1 | Cashflow before tax | \$300,000 | \$800,000 | \$800,000 |
| Year 2 | Cashflow before tax | \$450,000 | \$550,000 | \$900,000 |
| Year 3 | Cashflow before tax | \$650,000 | \$550,000 | \$400,000 |
| Year 4 | Cashflow before tax | \$200,000 | \$180,000 | \$200,000 |

- i. Capital allowances are available on the project at 25% and the corporation tax rate is 20%
- ii. The company's cost of capital in money terms is expected to be 10%.
- iii. The cost incurred in development of the new product amount to £300,000.
- iv. The estimated useful life of the investment is 10 years.
- v. Foreign Currency exchange rate \$1.57: £1

Required:

(a) Calculate the net present value in £ (GBP) based on the three level of product quality, Standard, Luxury and Premium.

(15 marks)

- (c) Critically evaluate the following investment appraisal techniques: -
 - Net Present Value
 - Payback
 - Accounting Rate of Return

(10 marks) (Total 25 marks)

Question 2

Felix a public listed company and is considering a major investment. The company needs an appropriate discount rate on which to base investment decisions.

An analysis of its capital structure as revealed the following: -

- i. The company has just paid a divided of £2.50 (ex div)
- ii. The market capitalisation of its shares is £1m
- iii. Shares in issue are 100,000.
- iv. The company has £2m of redeemable loan note finance with a current market value of £97 (per £100 nominal). Interest is payable for the next three years at 10% and are to be redeemed in cash at a 10% premium at the end of three years.
- v. The corporation tax rate is expected to be 20% for the foreseeable future.

Required:

(a) Calculate the companies Weighted Average Cost of Capital (WACC).

(10 marks)

(b) Evaluate the Capital Asset Pricing Model and also discuss the importance of the Beta risk factor

(15 marks)

(Total 25 marks)

Please turn the page

Question 3

Frail Company is reviewing its credit control policy due to increasing interest rates.

The Credit Controller has asked for your help to ascertain the impact of extended credit terms in light of increasing levels of trading.

The following information is available

| | Scenario 1 | Scenario 2 | Scenario 3 |
|-------------------|------------|------------|------------|
| Receivable's days | 40 days | 50 days | 90 days |
| Interest rate | 6% | 8% | 10% |

Annual Sales on credit are expected to generate is £1,500,000

On average the company generates £9,500 per month excess cash, which it intends to invest in short term securities. The interest it can earn is 5% per annum. The transaction cost with each investment of funds is £60.

Required:

1. Assuming that Frail extends the level of credit from its present credit terms 40 days to 50 days and to 90 days, calculate the extra cost of finance.

(10 Marks)

2. Using the Baumol model calculate the amount of cash to be invested in each transaction.

(6 Marks)

3. Evaluate the usefulness of Just in Time (JIT) as a cash management technique,

(9 Marks)

(Total 25 marks)

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SECTION B - ANSWER ONE QUESTION ONLY

Question 4

The Managing Director of a Dunn Plc has asked you to advise on the management of its foreign exchange exposure at the next Board Meeting. In preparation for the meeting, you are required to write a briefing paper that answers to following questions: -

Required:

- (a) Critically discuss the terms
 - i. Transaction risk
 - ii. Forward Rate
 - iii. Spot Rate

(12 marks)

- (b) Discuss the following types of hedging techniques: -
 - I. Foreign exchange Swaps
 - II. Interest rate Swaps
 - III. Money Market Hedge

(13 marks)

(Total 25 marks)

Question 5

Frankland Plc has been approached by an investor who is interested in buying the company. The Board of Directors is unsure as to how to value the company.

Required:

- Critically discuss the following types of valuation methods available to the company.
 - I. Net Book Value
 - II. Price Earnings Ratio
 - III. Market Capitalisation

(Total 25 marks)

Present Value Table

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

n = number of periods until payment

Discount rate ®

| | | | | | SCOUNT Tate 10 | | | | | | |
|---------|-------|-------|-------|-------|----------------|-------|-------|-------|-------|-------|--|
| Periods | 1% | 2% | 3% | 4% | 5% | 6% | 7% | 8% | 9% | 10% | |
| (n) | | | | | | | | | | | |
| 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 | |

| (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 |
| | | | | | | | | | | |



Annuity Table

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

Where r = discount rate n = number of periods

| Periods | 1% | 2% | 3% | 4% | 5% | 6% | 7% | 8% | 9% | 10% |
|---------|--------|--------|--------|--------|--------|-------|---------------|-------|-------|-------|
| (n) | | | | | | | | | | |
| 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 | 3.460 | 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 | 10.370 | 9.787 | 9.253 | 8.760 | 8.306 | 7.887 | 7.499 | 7.139 | 6.805 | 6.495 |
| 12 | 11.260 | 10.580 | 9.954 | 9.385 | 8.863 | 8.384 | 7.943 | 7.536 | 7.161 | 6.814 |
| 13 | 12.130 | 11.350 | 10.630 | 9.986 | 9.394 | 8.853 | ∕8.358 | 7.904 | 7.487 | 7.103 |
| 14 | 13.000 | 12.110 | 11.300 | 10.560 | 9.899 | 9.295 | 8.745 | 8.244 | 7.786 | 7.367 |
| 15 | 13.870 | 12.850 | 11.940 | 11.120 | 10.381 | 9.712 | 9.108 | 8.559 | 8.061 | 7.606 |

| (n) | 11% | 12% | 13% | 14% | 15% | 16% | 17% | 18% | 19% | 20% |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| (11) | 1170 | 1270 | 1370 | 14 70 | 1370 | 1070 | 17 70 | 1070 | 1970 | 2070 |
| | | | | | | | | | | |
| 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 |