

**INSTITUTE OF BANKERS IN MALAWI**

**ADVANCED DIPLOMA IN BANKING EXAMINATION**

**SUBJECT: CORPORATE FINANCE (IOBM- AD308)**

**Date: Tuesday, 15th May 2018**

**Time Allocated: 3 hours (13:30 – 16:30 Hours)**

**INSTRUCTIONS TO CANDIDATES**

1 This paper consists of **TWO** Sections, A and B.

2 Section A consists of 4 questions, each question carries 15 marks.

Answer **ALL** questions.

3 Section B consists of 4 questions, each question carries 20 marks. Answer **ANY TWO** questions.

4 You will be allowed **10 minutes** to go through the paper before the start of the examination, you may write on this paper but not in the answer book.

5 Begin each answer on a new page.

6 **Please write your examination number on each answer book used. Answer books without examination numbers will not be marked.**

7 All persons writing examinations without payment will risk expulsion from the Institute.

8 If you are caught cheating, you will be automatically disqualified in all subjects seated this semester.

9 DO NOT open this question paper until instructed to do so.

**SECTION A (60 MARKS)**

Answer **ALL** questions from this section

**QUESTION 1**

Likuni City Furnitures is an upcoming entrepreneurship which specializes in manufacturing luxury Sofa sets. Each Sofa set has a projected selling price of MK1,500,000. The firm’s costs which remain unchanged each month amount to MK4,000, 000 while costs which change directly with the number of chairs produced amount to MK1000,000 per sofa set.

**Required**

1. Find the firm’s break-even level of monthly output of sofa sets. *(5 marks)*
2. Calculate the firm’s expected monthly profit or loss if the firm plans to sell 55 sofa sets per month. *(5 marks)*
3. Calculate the increase in production that would be required to make a profit of MK20,000,000 if the firm is making a loss of MK1,000,000 per month. *(5 marks)*

***(Total 15 marks)***

**QUESTION 2**

Mwaiwanga Solar Energy Ltd issued 1,000,000 shares on the market where each share was selling at MK500 and that the annual dividend payable was at MK 40 per share with expected annual growth of 2%. The company also issued 100,000 MK100 par value bonds on the market which were trading at MK99 with a yield of 15%. The corporate tax rate was at 10%.

**Required**

1. Calculate the cost of equity taking into consideration the annual growth of dividends. *(4 marks)*
2. Calculate the Weighted Average Cost of Capital for the company. *(7 marks)*
3. Explain the **two** main demerits of WACC model as a tool for determining the cost that a firm pays for the capital used in financing its new investments. *(4 marks)*

***(Total 15 marks)***

**QUESTION 3**

1. Define and distinguish between a merger and acquisition of companies. *(4 marks)*
2. Explain the difference between horizontal and vertical merger. *(2 marks)*
3. Suppose you are a Capital Investment consultant and you have been approached by the Directors of Masiku Engineering Ltd who are considering to acquire company. They are seeking clarification on whether to buy shares or assets of the company.

**Required**

Outline **three** advantages for buying the shares other than buying the assets.

*(6 marks)*

1. Discuss any **three** main expected gains from acquisitions and mergers. *(3 marks)*

***(Total 15 marks)***

**QUESTION 4**

1. Explain the **three** main stages in an investment appraisal process. *(3 marks)*
2. Sharpevale Technology Ltd is considering undertaking a solar energy project which is expected to run for 6 years and will require an investment of MK12,000,000 in an asset which it would have no residual value at the end of the project’s life. The project will be considered viable if the Accounting Rate of Return (ARR) is at least 20% and the payback period is no more than four years. It is expected that the expected annual profits before depreciation from the project would be:

|  |  |
| --- | --- |
| Year | Annual Profits (MK) |
| 1 | 3,000,000 |
| 2 | 4,000,000 |
| 3 | 3,000,000 |
| 4 | 5,000,000 |
| 5 | 4,000,000 |
| 6 | 1,000,000 |

**Required**

1. Calculate the ARR of the project *(4 marks)*
2. Calculate the payback time for the project *(4 marks)*
3. Determine if this project would be pursued in view of the pre-conditions of ARR and payback period. *(4 marks)*

***(Total 15 marks)***

**SECTION B (40 MARKS)**

Answer ANY **TWO** questions from this section

**QUESTION 5**

1. The directors for Zomba Medical Diagnostics Ltd are have approved a purchase of a scanning machine which costs MK100,000,000 which is expected to generate pre-tax profits from clients requiring scanning service as given below:

|  |  |
| --- | --- |
| Year | Pre-tax Profit (MK) |
| 1 | 25,000,000 |
| 2 | 17,000,000 |
| 3 | 14,000,000 |
| 4 | 22,000,000 |
| 5 | 20,000,000 |

Considering that Zomba Medical Diagnostics remits corporation tax of 35% one year in arrears and receives capital allowances on 30% reducing balance basis following a 40% first year allowance. The scanning machine has 5 year life of which at the end will be sold for MK1,000,000 and that that the company’s after tax cost of capital is 15%.

**Required**

1. Calculate the capital allowance and tax savings over the period. (*5 marks)*
2. Calculate the total tax liabilities over the period. *(5 marks)*
3. Calculate the NPV for the machine. *(4 marks)*
4. Recommend whether the machine should be purchased. *(2 marks)*

1. The one year rate of inflation is expected to be 20%. The one year money rate of interest is 32%.

**Required**

Calculate the one year real rate of interest. *(4 marks)*

***(Total 20 marks)***

**QUESTION 6**

1. Thonje Cotton Ginners Ltd shareholders are demanding that there should be a clear policy on which they will be receiving dividends from the company in regards to the capital they supply to the company. The company should clearly stipulate how much of the firm’s earnings shall be distributed as dividends and also how much shall be retained for future growth and operations.

**Required**

1. Explain the **four** determinants to be considered when formulating the dividend policy  *(8 marks)*
2. Describe any **two** dividend theories that may be considered when formulating the dividend policy. *(4 marks)*
3. Genius Capital Consultants Ltd have received a request from their client who would like to continue investing in one stock only and lay-off the shares on one stock. The Client is enquiring on stock A which reported a net income of MK 20,000,000 and declared a dividend of MK0.50 per share and they invested in 10,000 common shares. Stock B reported a net income of MK25,000,000 with a declared dividend of MK0.60 per share and the Client has 11,000 common shares.

**Required**

Calculate the Dividend pay-out ratio and recommend to the Client whether to continue investing in stock A or B. Give reasons for the selected stock. *(8 marks)*

***(Total 20 marks)***

**QUESTION 7**

1. Zangazanga Seeds Company Ltd requires MK500,000,000 to finance its activities. Potential shareholders require an after-tax return of 15% per annum on their investment, while its potential borrowers require 12% per annum before tax or 8% after tax, on a 30% tax rate.

**Required**

Evaluate the following financing option and comment on the results:

1. 100% debt raised to finance the project. *(4 marks)*
2. 70% equity and 30% debt raised to finance the project. *(4 marks)*
3. 80% equity and 20% debt raised to finance the project *(4 marks)*
4. 100% equity raised to finance the project. *(4 marks)*
5. Mention any **two** advantages of debt capital over equity. *(2 marks)*
6. Explain any **two** factors that influence the cost of capital. *(2 marks)* ***(Total 20 marks)***

**QUESTION 8**

1. Stocks of two companies Viphya Storage plc and Chilinda Systems plc on Malawi Stock Exchange (MSE) have the following possible returns and associated probabilities:

|  |  |  |  |
| --- | --- | --- | --- |
| Source of risk | probability | Viphya plc return | Chilinda plc return |
| Headline Risk | 0.2 | 15% | 8% |
| Obsolescence Risk | 0.3 | 40% | 2% |
| Inflationary Risk | 0.1 | 10% | 14% |
| Interest Rate Risk | 0.4 | 12% | 9% |

**Required**

Calculate the expected return and the expected risk for each stock separately and recommend to an investor which of the two stocks is appropriate. *(12 marks)*

1. The shares of Kaning’ina Info Systems plc have a beta of 0.5 while the shares of Waliranji Feeds plc have a beta of 2.0. Investors have an expected rate of return of 4% from shares in Kaning’ina plc and the expected returns to the market are 6%. Calculate the expected rate of return for investors in Waliranji plc by using the Capital Asset Pricing Model.*(8 marks)*  ***(Total 20 marks)***

**END OF EXAMINATION PAPER**