

## COLLEGE OF BUSINESS, PEACE, LEADERSHIP AND GOVERNANCE

#### NMAC503: FINANCIAL AND MANAGEMENT ACCOUNTING

#### END OF FIRST SEMESTER EXAMINATION

LECTURER: DR J MUZURURA

TIME: 5 HOURS

Instructions to candidates

Answer one question

# **QUESTION 1**

#### Nhamo Enterprise is evaluating a project with the following characteristics

- Fixed capital investment is \$2000000
- The project has an expected six-year life
- The initial investment in net working capital is \$200000
- At the end of each year, net working capital must be increased so that the cumulative investment in networking capital is one-sixth of the next year's projected sales
- The fixed capital is depreciated 30 percent 1.35 percent in year 2. 20 percent in year 3. 10 percent in year 4. 5 percent in year 5 and 0 percent in year 6
- Sales are \$1200000 in year 1. They grow at 25 percent annual rate for the next two years, and then grow at 10 percent annual rate for the last three years
- Fixed cash operating expenses are \$150000 for years 1-3 and \$130000 for years 4-6
- Variable cash operating expenses are 40 percent of sales in year 1, 39 percent of sales in year 2, and 38 percent in years 3-6
- Nhamo Enterprise's marginal tax rate is 30 percent
- Nhamo Enterprise will sell its fixed capital investment for \$150000 when the project terminates and recapture its cumulative investment in net working capital
- Income taxes will be paid on any gains
- The project's required rate of return is 12 percent
- If taxable income on the project is negative in any year, the loss will offset gains elsewhere in the corporation, resulting in tax savings

#### Required

- a) Determine whether this is a profitable investment using the NPV and IRR (30marks)
- b) Evaluate the project's profitability if the tax rate increases to 40 percent per annum and the required rate of return increases to 14% (30 marks)

## **QUESTION TWO**

X. Ltd is a garment manufacturing company operating in Bulawayo City. The company's financial information as at 31 December 2018 was as follows;

| Account   | \$     |
|---|--------|
| Freehold Property at cost                         | 180000 |
| Provision for Depreciation for free hold property | 45000  |

| Plant and Machinery at cost                        | 97000  |
|--|--------|
| Provision for depreciation for plant and machinery | 53000  |
| Motor Vehicle at cost                              | 41000  |
| Provision for depreciation of motor vehicles       | 27000  |
| Trade receivables                                  | 34600  |
| Provision for doubtful debts                       | 1200   |
| Trade Payables                                     | 5720   |
| Bank   | 11400  |
| Sales  | 900000 |
| Sales returns                                      | 7000   |
| Purchases  | 410890 |
| Purchase returns                                   | 4000   |
| Wages  | 138000 |
| Rent payable                                       | 10000  |
| Rent receivable                                    | 1500   |
| Heating expenses                                   | 5720   |
| Communication expenses                             | 3315   |
| Stationery   | 9195   |
| Repairs to machinery                               | 17600  |
| Discounts allowed                                  | 3500   |
| Discounts received                                 | 2500   |
| Carriage inwards                                   | 4240   |
| Carriage outwards                                  | 2500   |
| Inventory  | 40000  |
| Drawings   | 29000  |
| Capital  | 300000 |
|  |        |

## **Additional Information**

- 1 Inventory at 31 December 2017 costs \$48000
- 2 Depreciation is to be calculated as follows; freehold property at 5% per annum at straight line; plant and machinery at 20% at reducing balance; Motor vehicles at 25% per annum at reducing balance
- 3 Included in trade receivables is a bad debt of \$2000. The provision for doubtful debts is to be 5.5% of trade receivables
- 4 \$700 was owing for heating expenses, and \$300 for stationary. The inventory of unused stationery at 31 December 2019 had cost \$650
- 5 Rent paid in advance was \$3000; rent receivable was owing in the sum of \$350

- 6 The company had taken goods for its own use. The goods had cost \$1400. No entries for this had been made in the books.
- 7 Repairs to machinery paid in advance \$500
- 8 Purchased owing was \$800
- a) Prepare Profit and Loss Statement for the year ended 31 December 2019 (30 marks)
- b) Prepare statement of financial Position as at 31 December 2019 (30 marks

## **QUESTION 3**

Lilian Brand is a manufacturer of leather bags in Mutare City. It is a well known brand in the market. Peter was appointed as the CEO of Brand Pluse four years ago. He has dominant and arrogant style of working and does not take into consideration the ideas suggested by other board members.

Kelly, a newly appointed directo of Brand Plus, wonders why Lilian Fashio has not comeup with any new product of the last three years and alos has no projects under consideration. In his opinion, in this competitive era, the company should try to give something innovative of the customer. At the same time, diversification could also help Lillian Brand to remain in competition. Therefore, Kelly suggests that along with manufacturing leather bags, Brand Pluas should start manufacturing leather shoes. However, Peter does not like the idea. In addition, Kelly expects that other members of the board will not support hime because they appper to him to be passive.

With the growth in retail chains, Lillian Fashiobb is facing tough competition. The sales of Lilian Brand have been showing a decreasing trend over the last two years as have profits. In addition, the market share of lilian Brand has declined from 33 percent to 17 percent over the last fours years. The financial information of Lilian Brand is as follows;

|                     |               | Marc | h 2019 \$000 |              | April 2019\$ | 6000   |
|---------------------|---------------|------|--------------|--------------|--------------|--------|
| Non current assets  | 216.00        |      |              | 195.7        | 5            |        |
| Property, plant and | <u>249.75</u> |      | 465.75       | <u>237.6</u> | <u>60</u>    | 433.35 |
| equipment           |               |      |              |              |              |        |

#### **Statement of Financial Position**

| Current assets      |               |               |               |               |
|---------------------|---------------|---------------|---------------|---------------|
| Inventory           | 162.00        |               | 135.00        |               |
| Receivables         | 46.50         |               | 31.10         |               |
| Cash at bank        | <u>0.75</u>   | 209.25        | 2.05          | <u>174.15</u> |
|                     |               | 675.00        |               | <u>607.50</u> |
| Shareholder's       |               |               |               |               |
| funds               |               |               |               |               |
| Ordinary shares     | 67.50         |               | 67.50         |               |
| Reserves            | <u>145.8</u>  | 213.50        | <u>141.75</u> | 209.25        |
|                     |               |               |               |               |
| Loan funds          |               |               |               |               |
| 15% debentures      | 152.55        |               | 152.55        |               |
| (\$100)             |               |               |               |               |
| Term loans          | <u>94.50</u>  | 247.50        | <u>60.75</u>  | 213.30        |
| Current liabilities |               |               |               |               |
| Dividends payable   | 12.15         |               | 12.15         |               |
| Tax payable         | 6.75          |               | 10.80         |               |
| Trade payables      | <u>195.74</u> | 214.55        | 162.00        | <u>184.95</u> |
|                     |               | <u>675.00</u> |               | <u>607.50</u> |

Extract from statement of comprehensive income

|                           | 2018    | 2019    |
|---------------------------|---------|---------|
|                           | \$000   | \$000d  |
| sales                     | 586.80  | 633.60  |
| EBIT                      | 56.70   | 66.50   |
| interest                  | (27.00) | (23.50) |
| Earnings before tax       | 29.70   | 43.00   |
| Taxation @25%             | (7.43)  | (10.75) |
| Available to shareholders | 22.27   | 32.25   |

| Dividend          | (19.00) | (19.00) |
|-------------------|---------|---------|
| Retained earnings | 3.27    | 13.25   |

Required

- a) Calculate the Z score for Brand Plus and comment on the probability of the failure of this company
- b) Identify the qualitative information which indicates that Brand Plus might fail
- c) Recommend the performance improvement strategies that may be adopted by Brand

# END OF EXAM