**AFB Mock Exam**

**ANSWER QUESTION 1 AND ANY TWO OTHER QUESTIONS**

**Section A: Compulsory question for 40 marks**

**Question** 1

The following trial balance is for M plc for the year ended 30/06/2023.

|  |  |  |
| --- | --- | --- |
|  | £000 | £000 |
| £1 Ordinary share capital |  | 500 |
| 10% Debentures |  | 200 |
| 5% Long term bank loan |  | 100 |
| Retained profits |  | 50 |
| Land and buildings at cost | 500 |  |
| Fittings at cost | 170 |  |
| Fittings – accumulated depreciation |  | 20 |
| Machinery at cost | 300 |  |
| Machinery – accumulated depreciation |  | 50 |
| Purchases and sales | 900 | 1400 |
| Opening inventory | 50 |  |
| Receivables and payables | 70 | 47 |
| Rates | 60 |  |
| Miscellaneous expenses | 24 |  |
| Salaries and wages | 140 |  |
| Energy bills | 28 |  |
| Audit fee | 15 |  |
| Bad debt | 5 |  |
| Directors’ remuneration | 44 |  |
| Debenture interest | 18 |  |
| Interest on Bank loan | 5 |  |
| Interim ordinary dividend paid | 25 |  |
| Cash | 2 |  |
| Bank | 11 |  |
| Totals | 2367 | 2367 |

**Additional information as at 30/06/2023**:

* Inventory was valued at £60,000.
* Rates prepaid £4,000.
* Energy bills accrued £2,000.
* Audit fee accrued £1,000
* The fittings to be depreciated by 20% on straight line
* The machinery to be depreciated by 10% on reducing balance.
* The directors wish to provide £25,000 for taxation.
* The directors propose a final ordinary dividend of 7 p per share.

**Required:**

**(a) Income Statement for the year ended 30/06/2023. [20 marks]**

**(b) Statement of Financial Position as at 30/06/2023. [20 marks]**

**Section B: Attempt ANY Two (2) questions – 30 marks each**

**Question 2**.

A company is considering the following for next year for a new product.

Budgeted production and sales: 45,000 units [Maximum capacity 80,000 units]

Selling price per unit: £300

Variable costs per unit: £180

Fixed costs: £3,600,000 per annum.

**(a)** **Calculate the budgeted profit, breakeven quantity and the**

**margin of safety. [10 marks]**

**(b) Sketch a breakeven graph to show the above information**

**in (a). [5 marks]**

**(c) Calculate the budgeted sales volume required to make a**

**profit of £2,400,000. [5 marks]**

**(d) State the limitations of breakeven analysis. [5 marks]**

**(e) A proposal is being considered by the company to supply 20,000 units**

**per annum of the same product to a wholesaler. Modifications to**

**the product which will increase its variable costs by £5 per unit.**

**Calculate the selling price per unit for the above proposal if a**

**profit of £25 per unit is required.**

**Assume the company has the excess capacity to**

**deal with the special order and there are no additional fixed**

**costs. [5 marks]**

**Question 3**.

A Ltd and B Ltd, are from the same industry, and their financials are summarised below.

**Income statements [in £000]**

|  |  |  |
| --- | --- | --- |
|  | A Ltd | B Ltd |
| Sales | 80 | 120 |
| Gross profit | 20 | 24 |
| Profit before tax | 10 | 15 |

**SOFP [in £000s]**

|  |  |  |
| --- | --- | --- |
|  | A Ltd | B Ltd |
| Current assets |  |  |
| * Inventory | 15 | 17.5 |
| * Receivables | 25 | 20 |
| * Bank | 4 | 2 |
| * Cash | 1 | 0.5 |
| Current liabilities | 18 | 27 |

**(a) Calculate the following ratios for both companies: [12 marks]**

* **Gross profit ratio**
* **Net profit ratio**
* **Inventory holding in days**
* **Receivables ratio in days**
* **Current ratio**
* **Quick ratio**

**(b) Comment on the comparative financial performance of**

**the 2 companies using the above ratios. [14 marks]**

**(c) State two limitation of ratio analysis. [4 marks]**

**Question 4**.

An investment proposal to increase sales next year is being considered.

It requires an initial investment of £210,000 (year 0) will be required to improve its current machinery. This will be sold for £30,000 at the end of 5 years.

* The product’s contribution is £42 per unit
* Fixed costs will be £41,000 per annum for each of the 5 years.
* The company’s cost of capital is 10 % and the payback required from such investments is 2.5 years.
* Additional sales volumes expected for the next 4 years as follows:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Year | 1 | 2 | 3 | 4 | 5 |
| Sales (units) | 3,000 | 4,000 | 5,000 | 3,000 | 2,000 |

* Discount factors @ 8 % are as follows:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Year | 1 | 2 | 3 | 4 | 5 |
| Discount factors @ 10 % | 0.909 | 0.826 | 0.751 | 0.683 | 0.621 |

**Required:**

**a) The relevant annual cash flows for the proposal. [7 marks]**

**b) The Payback and the Net Present Value (NPV). [7 marks]**

**c) Advice the company using the results from (b). [5 marks]**

**d) Comment [no calculations required] on the investment proposals Internal**

**Rate of Return [IRR}. State two advantages of IRR as compared to NPV.**

**[6 marks]**

**e) State five factors that require consideration before a final decision is**

**made.** **[5 marks]**

**END OF EXAMINATION PAPE**

**[You should have answered Question 1 and any 2 other questions.]**

**Format for Financial statements – for reference purpose only. Do not use them to write your answers.**

**Name of company**

**Income statement for the y/e………..**

|  |  |  |
| --- | --- | --- |
| Sales |  |  |
| **Cost of sales** |  |  |
| Opening inventory |  |  |
| Purchases |  |  |
| Closing inventory |  |  |
| **GP** |  |  |
| **Expenses** |  |  |
|  |  |  |
|  |  |  |
| **PBT** |  |  |
| CT |  |  |
| **PAT** |  |  |
| Dividends -- Interim  -- Final |  |  |
| Retained profit for the year |  |  |
| Retained profit b/f |  |  |
| Retained profit c/f |  |  |

**Name of company**

**SOFP as at……….**

|  |  |  |  |
| --- | --- | --- | --- |
| **Non - current assets** | **Cost** | **Accumulated**  **Depreciation** | **NBV** |
|  |  |  |  |
|  |  |  |  |
| **Current assets** |  |  |  |
| Inventory |  |  |  |
| Receivables |  |  |  |
| Prepayments |  |  |  |
| Bank |  |  |  |
| Cash |  |  |  |
| **Total assets** |  |  |  |
|  |  |  |  |
| **Share capital** |  |  |  |
|  |  |  |  |
| **Reserves** |  |  |  |
| Retained profits |  |  |  |
| **Shareholders’ funds** |  |  |  |
|  |  |  |  |
| **Non - current liabilities** |  |  |  |
|  |  |  |  |
|  |  |  |  |
| **Current liabilities** |  |  |  |
|  |  |  |  |
|  |  |  |  |
| **Shareholders’ funds & liabilities** |  |  |  |

**Financial Ratios & Formulae**

|  |  |
| --- | --- |
| Ratio | Formula |
| Gross profit ratio (%) | Gross profit / Sales x 100 |
| Net profit ratio (%) | Net profit / Sales x 100 |
| Current ratio | Current assets / Current liabilities |
| Acid test / Quick ratio | (Current assets – Inventory) /Current liabilities |
| Inventory holding (days) | Closing inventory / Cost of sales x 365 days |
| Receivables ratio (days) | Receivables / Sales x 365 days |
| Payables ratio (days) | Payables / Cost of sales x 365 |