**ACCOUNTING FOR BUSINESS RESIT MOCK EXAM & SUGGESTED ANSWERS**

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

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

**Question** 1

The trial balance below is for S plc for the y/e 31/12/2021 [in £000s]

|  |  |  |
| --- | --- | --- |
| £1 Ordinary share capital |  | 330 |
| 6% Long term bank loan |  | 100 |
| 12% Debentures |  | 100 |
| Share premium |  | 110 |
| Purchases and Sales | 800 | 1300 |
| Inventory 1/1/2021 | 150 |  |
| Receivables and payables | 94 | 75 |
| Distribution expenses | 40 |  |
| Rates and insurance | 50 |  |
| Staff salaries | 90 |  |
| Advertising | 30 |  |
| Utilities | 20 |  |
| Audit fee | 15 |  |
| Bad debt | 2 |  |
| Directors’ remuneration | 36 |  |
| Debenture interest | 11 |  |
| Interest on bank loan | 6 |  |
| Cash | 2 |  |
| Bank | 4 |  |
| Premises at cost | 500 |  |
| Equipment at cost | 240 |  |
| Equipment – accumulated depreciation |  | 40 |
| Furniture & fittings at cost | 100 |  |
| Furniture & fittings – accumulated depreciation |  | 60 |
| Retained profits |  | 100 |
| Interim ordinary dividend | 25 |  |
| Totals | 2215 | 2215 |

**Additional information as at 31/12/2021**:

* Inventory was valued at £170,000.
* Prepayments for: Insurance £6000; advertising £4000.
* Accruals for: Rates £1000; Utilities £2000; Audit fee £1000
* The equipment to be depreciated by 20% on reducing balance
* The furniture & fittings to be depreciated by 20% on straight line.
* The directors wish to provide £32,000 for taxation.
* The directors propose a final ordinary dividend of 10p per share.

**Required:**

**a) Income Statement for the year ended 31/12/2021. [18 marks]**

**b) Statement of Financial Position as at 31/12/2021. [18 marks]**

**c) Theory question on the two types expenditure. [4 marks]**

**S plc**

**Income statement for the y/e 31/12/2021 [£000s]**

|  |  |  |
| --- | --- | --- |
| Sales |  | 1300 |
| Cost of sales |  |  |
| Opening inventory | 150 |  |
| Purchases | 800 |  |
| Closing inventory | [170] | [780] |
| GP |  | 520 |
| Expenses |  |  |
| Rates and insurance [50 – 6 + 1] | 45 |  |
| Advertising [30 – 4] | 26 |  |
| Utilities [20 + 2] | 22 |  |
| Audit fee [15 +1] | 16 |  |
| Depreciation of equipment [240 – 40] x 0.2 | 40 |  |
| Depreciation of furniture & fittings [100 x 0.2] | 20 |  |
| Distribution expenses | 40 |  |
| Staff salaries | 90 |  |
| Bad debt | 2 |  |
| Directors’ remuneration | 36 |  |
| Debenture interest [11 + 1] | 12 |  |
| Interest on bank loan | 6 | [355] |
| PBT |  | 165 |
| CT |  | [32] |
| PAT |  | 133 |
| Dividends – Interim  -- Final [330 x £0.1] | 25  33 | [58] |
| Retained profit for the year |  | 75 |
| Retained profit b/f |  | 100 |
| Retained profit c/f |  | 175 |

**S plc**

**SOFP as at 31/12/2021 [in £000s]**

|  |  |  |  |
| --- | --- | --- | --- |
| **Non - current assets** | **Cost** | **Accumulated**  **Depreciation** | **NBV** |
| Premises | 500 | ---- | 500 |
| Equipment | 240 | 40 + 40 = 80 | 160 |
| Furniture & fittings | 100 | 60 + 20 = 80 | 20 |
|  |  |  | 680 |
| **Current assets** |  |  |  |
| Inventory | 170 |  |  |
| Receivables | 94 |  |  |
| Prepayments [6 + 4] | 10 |  |  |
| Bank | 4 |  |  |
| Cash | 2 |  | 280 |
| **Total assets** |  |  | 960 |
|  |  |  |  |
| **Share capital** |  |  |  |
| £1 Ordinary shares |  |  | 330 |
| **Reserves** |  |  |  |
| Share premium |  |  | 110 |
| Retained profit |  |  | 175 |
| Shareholders’ funds |  |  | 615 |
| **Non-current liabilities** |  |  |  |
| 6% Long term bank loan | 100 |  |  |
| 12% Debentures | 100 |  | 200 |
| **Current liabilities** |  |  |  |
| Accruals [1 + 2 + 1 + 1] | 5 |  |  |
| Payables | 75 |  |  |
| CT | 32 |  |  |
| Final dividends | 33 |  | 145 |
| **Shareholders’ funds & liabilities** |  |  | **960** |

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

**Question 2**.

A new product to be launched has the following details:

Budgeted production and sales are 22,000 units.

Maximum capacity is 40,000 units.

Selling price per unit is £225

Variable cost per unit is £135

Fixed costs per annum is £900,000

**Required:**

**a) C/S ratio, budgeted profit, break-even sales volume and the margin of**

**safety. [10 marks]**

**Answers**

Contribution per unit = £225 - £135 = £90

C/S ratio = £90 / £225 = 0.4

Profit = Total contribution – Total fixed costs

= £90 x 22,000 units - £900,000

= £1,980,000 - £900,000 = £1,080,000

BEP [units] = Total fixed costs / Contribution per unit

= £900,000 / £90 = 10,000 units

Margin of safety = Budgeted sales – BEP = 22,000 – 10,000 = 12,000 units

**b) The sales volume required to make a profit of £1,800,000. [5 marks]**

**Answers**

Sales volume required = [Profit required + Fixed costs] / Contribution per unit

= [£1,800,000 + £900,000] / £90

= £2,700,000 / £90 = 30,000 units.

**c) The marketing director suggests the following changes:**

* **Selling price to reduce to £210 per unit**
* **Variable costs per unit to reduce by 20%.**
* **Fixed costs to increase by 3%**
* **Sell 28,000 units.**

**Calculate the profit, breakeven point and margin of safety for**

**this strategy.**

**Comment on this strategy. [10 marks]**

**Answers**

Revised variable costs per unit = £135 x 0.8 = £108

Revised fixed costs = £900,000 x 1.03 = £927,000

Revised contribution per unit = £210 - £108 = £102

Profit = Total contribution – Total fixed costs

= £102 x 28,000 units - £927,000

= £2,856,000 - £927,000 = £1,929,000

BEP [units] = Total fixed costs / Contribution per unit

= £927,000 / £102 = 9088.24 = 9088 units

Margin of safety = 28,000 – 9088 = 18,912 units

**Comment on the new strategy:** Higher profit, lower BEP and has a higher margin of safety.

**d) What limitations apply in the above analysis. [5 marks]**

**Answers**

* All costs can be analysed into variable and fixed costs.
* Selling price per unit, variable costs per unit and total fixed costs are expected to remain constant within the relevant range.
* Inventory levels remains constant.
* All other factors are expected to remain constant.
* Production- sales mix is expected to remain constant.

**Question 3**.

The latest financials [in £000s] of KP Ltd are provided below.

**Income statements [in £000]**

|  |  |  |
| --- | --- | --- |
|  | 2021 | 2022 |
| Sales | 80 | 120 |
| Gross profit | 20 | 24 |
| Profit before tax | 10 | 15 |

**SOFP [in £000s]**

|  |  |  |
| --- | --- | --- |
|  | 2021 | 2022 |
| Current assets |  |  |
| * Inventory | 15 | 17.5 |
| * Receivables | 25 | 20 |
| * Bank | 4 | 2 |
| * Cash | 1 | 0.5 |
| Payables | 10 | 11 |
| Other current liabilities | 8 | 16 |

**a) Calculate the following ratios for both years [14 marks]**

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

**b) Comment on the performance of the company over the two years using the above ratios [16 marks]**

**Answers**

**a)**

|  |  |  |
| --- | --- | --- |
| **Year** | **2021** | **2022** |
| **Ratio calculations** |  |  |
| GP ratio = [GP / Sales] x 100 | [20/80] x 100 = 25% | [24/120] x 100 = 20% |
| NP ratio = [PBT / Sales] x 100 | [10/80] x 100 = 12.5% | [15/120] x 100 = 12.5% |
| Inventory holding in days =  [Inventory / Cost of sales] x 365 | [15 / (80 – 20)] x 365 = 91.25  = 91 days | [17.5 /(120 – 24)] x 365 = 66.5  = 67 days |
| Receivables ratio in days =  Receivables / Sales x 365 days | [25 / 80] x 365 = 114.06 = 114 days | [20 / 120] x 365  = 60.83 = 61 days |
| Payables ratio in days =  Payables / Cost of sales x 365 | [10 / (80 – 20) ] x 365 = 60.83  = 61 days | [11 /(120 – 24)] x 365 = 41.82  = 42 days |
| Current ratio =  Current assets / Current liabilities  Norm is 2 | [45 / 18] = 2.5 | [40 / 27] = 1.48 |
| Quick ratio =  (Current assets – Inventory) /Current liabilities  Norm is 1 | [45 – 15] / 18  = 1.67 | [40 – 17.5] / 27  0.83 |

**b)**

**Commentary.**

**Profitability**

* GP ratio has decreased in 2022. The selling prices may have decreased or the purchased prices have increased or it could be effects of both in 2022.
* NP ratio has remained the same in both years.

**Liquidity**

* The current ratio is not close to the norm in both years.
* The quick ratio has improved in 2022

**Efficiency**

* Inventory holding has improved in 2022
* Receivables ratio has decreased; better credit control of its receivables.
* Payables ratio – this has decreased; has the company paid its suppliers earlier to take up discounts on offer by the supplier?

**Summary**

* Need to improve the current ratio.

**Question 4**

M plc seeks your advice on a new investment to produce and sell a new product.

The following five-year sales forecasts relate to it.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Year | 1 | 2 | 3 | 4 | 5 |
| Sales volume (units) | 10,000 | 12,000 | 15,000 | 16,000 | 11,000 |

Additional information for the new investment:

* New machinery costing £140,000 (year 0) will be required immediately.
* The product’s selling price and variable costs are expected to be £150 per unit and £130 per unit respectively over the 5 years.
* Fixed costs per annum specific to this investment potential is estimated to be £75,000 over the investment period. This incudes depreciation of £10,000 per annum for the new machinery.
* M plc’s cost of capital is 10 % and the payback required for the investment is 3 years.
* Discount factors @ 10 % are as follows:

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

**Required for the above investment proposal:**

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

**b) Accounting rate of return, payback and Net Present Value. [8 marks]**

**c) Advice the company using the measures in (b). [6 marks]**

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

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

**e) Explain the technique IRR. Outline its advantages. [4 marks]**

**END OF EXAMINATION PAPER**

**[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 |  | XXX |
| **Cost of sales** |  |  |
| Opening inventory |  |  |
| Purchases |  |  |
| Closing inventory |  | XXXX |
| **GP** |  | XX |
| **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 |