**MOCK EXAM 2**

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

**Section A: Compulsory 40 marks**

**Question 1**

You are provided the following trial balance as at 31/12/2020 for Z plc.

|  |  |  |
| --- | --- | --- |
|  | £000 | £000 |
| £1 Ordinary share capital |  | 8000 |
| Interim ordinary dividend paid | 50 |  |
| Retained profits |  | 1310 |
| Share premium |  | 400 |
| Business rates | 100 |  |
| Receivables | 1000 |  |
| Payables |  | 730 |
| Sales |  | 20000 |
| Purchases | 16000 |  |
| Opening inventory | 2000 |  |
| Administration expenses | 800 |  |
| Selling and distribution expenses | 1000 |  |
| Audit fee | 100 |  |
| Bad debt | 20 |  |
| Directors’ remuneration | 200 |  |
| Salaries and wages | 600 |  |
| 5% Debentures |  | 200 |
| 4% Bank loan [2028] |  | 400 |
| Debenture interest paid | 4 |  |
| Interest on bank loan | 16 |  |
| Freehold land at cost | 5000 |  |
| Buildings at cost | 2000 |  |
| Buildings – accumulated depreciation |  | 400 |
| Machinery at cost | 3000 |  |
| Machinery – accumulated depreciation |  | 500 |
| Cash | 5 |  |
| Bank | 45 |  |
|  | 31940 | 31940 |

**Additional information as at 31/12/2020**:

* Inventory was valued at £4,000,000.
* Selling expenses prepaid £250,000; business rates prepaid £30,000
* Accruals for: salaries £10,000; audit fee £40,000 and distribution expenses £50,000.
* Machinery to be depreciated by 20% on reducing balance basis.
* Buildings to be depreciated by 5% on straight line
* The directors wish to provide £150,000 for taxation.
* The directors propose a final ordinary dividend of 10p per share.

**Required:**

**(a) Income Statement for the year ended 31/03/2020. [20 marks]**

**(b) Statement of Financial Position as at 31/03/2020. [20 marks]**

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

**Question 2**

Y plc has asked you for advice on the following long-term investment. The following forecasts are for this investment:

|  |  |  |
| --- | --- | --- |
| Details | Year |  |
| Initial investment | 0 | £2,000,000 |
|  |  |  |
| Estimated sales volumes [units] | 1 | 70,000 |
|  | 2 | 85,000 |
|  | 3 | 100,000 |
|  | 4 | 80,000 |
|  | 5 | 40,000 |

Product’s contribution is £10 per unit for all 5 years.

Incremental fixed costs are £100,000 for each of the 5 years.

Y’s cost of capital is 10% and requires a payback of 3 years for this investment.

Scrap income from the redundant non-current assets from this investment in year 5 is £100,000

**Discount factor (present values) table is at the end of this exam.**

**Required:**

**(a) Prepare a cash flow statement for the investment. [6 marks]**

**(b) Calculate the payback and NPV of the investment. [6 marks]**

**(c) Advice Y plc on the financial viability of the investment. Justify**

**the basis of your advice. [5 marks]**

**(d) What other factors may need to be considered before a**

**final decision is made. [5 marks]**

**(e) Comment on the investment’s internal rate of return [IRR]. What**

**are the benefits of using IRR in the above analysis. [8 marks]**

**Question 3.**

The following information relate to X Ltd over 2 years .

Year 2020 2021

£000. £000

Sales (all on credit) 600 1000

Cost of sales 270 450

Total expenses. 180 260

Closing inventory 45 70

Closing receivables 47 60

Closing cash and bank 24 38

Closing payables 54 66

Accruals. 1 1

There are no other current assets or current liabilities.

**Required for both years:**

**(a) Calculate two profitability and two liquidity ratios. [8 marks].**

**(b) Calculate three efficiency ratios. [6 marks]**

**(c) Comment on financial performance of the company over the**

**2 years. [16 marks]**

**Question 4**

A new product is to be introduced by W Ltd.

Budgeted production and sales are 20,000 units.

Maximum capacity is 30,000 units.

The following data relate it

Selling price per unit £200

Variable cost per unit £120

Fixed costs per year £1,200,000

**Required:**

**(a) Calculate the C/S ratio, budgeted profit, break-even sales**

**volume and the margin of safety. (10 marks)**

**(b) Calculate the sales volume required to make a profit of**

**£500,000. (5 marks)**

**(c) Sales director suggests the following changes:**

* **Selling price to reduce to £195 per unit**
* **Variable costs per unit to reduce to £110**
* **Fixed costs to increase by 2%**
* **Sell 20,000 units.**

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

**this strategy.**

**Comment on this strategy. (10)**

**(e) What assumptions apply in the above calculations. (5 marks)**

**END OF MOCK EXAM 2**

**Discount Factor Table**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  | *Discount rate (i)* | | | |  |  |  |  |
| *Years* |  |  |  |  |  |  |  |  |  |  |  |
| *(N)* | 1% | 2% | 3% | 4% | 5% | 6% | 7% | 8% | 9% | 10% |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | 0.990 | 0.980 | 0.971 | 0.962 | 0.952 | 0.943 | 0.935 | 0.926 | 0.917 | 0.909 | 1 |
| 2 | 0.980 | 0.961 | 0.943 | 0.925 | 0.907 | 0.890 | 0.873 | 0.857 | 0.842 | 0.826 | 2 |
| 3 | 0.971 | 0.942 | 0.915 | 0.889 | 0.864 | 0.840 | 0.816 | 0.794 | 0.772 | 0.751 | 3 |
| 4 | 0.961 | 0.924 | 0.888 | 0.855 | 0.823 | 0.792 | 0.763 | 0.735 | 0.708 | 0.683 | 4 |
| 5 | 0.951 | 0.906 | 0.863 | 0.822 | 0.784 | 0.747 | 0.713 | 0.681 | 0.650 | 0.621 | 5 |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  | 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 | 1 |
| 2 | 0.812 | 0.797 | 0.783 | 0.769 | 0.756 | 0.743 | 0.731 | 0.718 | 0.706 | 0.694 | 2 |
| 3 | 0.731 | 0.712 | 0.693 | 0.675 | 0.658 | 0.641 | 0.624 | 0.609 | 0.593 | 0.579 | 3 |
| 4 | 0.659 | 0.636 | 0.613 | 0.592 | 0.572 | 0.552 | 0.534 | 0.516 | 0.499 | 0.482 | 4 |
| 5 | 0.593 | 0.567 | 0.543 | 0.519 | 0.497 | 0.476 | 0.456 | 0.437 | 0.419 | 0.402 | 5 |
|  |  |  |  |  |  |  |  |  |  |  |  |