**REVISION 1**

You are an intern working for a management consultancy firm. You are asked to advice AB plc on the following 2 potential opportunities.

**Scenario 1**

The following are relevant to a new product that AB plc expects to launch

next year.

Selling price per unit £50

Variable cost per unit. £30

Incremental annual fixed costs £2,000,000

Budgeted production and sales are 150,000 units.

Maximum capacity is 200,000 units.

**Required:**

**(a) Calculate the budgeted profit and margin of safety [6 marks]**

**(b) Sales volume required to make a profit of £1,200,000. [5 marks]**

**(c) AB plc’s marketing director suggests an alternative strategy:**

* **Selling price to increase by 10%**
* **Fixed costs to decrease by 1%**
* **Sales volume to decrease to 135,000 units.**

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

**this strategy. Comment on this strategy. [9 marks]**

**(d) A proposal is being considered by AB plc to supply 25,000 units**

**per annum of the same product to an online retailer. The retailer**

**requires modifications which will increase its variable costs by**

**£3 per unit. Delivery costs to the retailer will amount to**

**£50,000 per annum.**

**(i) the minimum price per unit to the retailer. [5 marks]**

**(ii) the selling price per unit for the above proposal if a profit of £5**

**per unit is required by AB plc. [4 marks]**

**Assume AB plc has the excess capacity for the next one year**

**to consider the special order.**

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**Scenario 2**

AB plc has provided you the following details for the new investment which involves introducing one of its successful products to a new market.

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

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

Initial investment in new machinery (in year 0) is £2,200,000

Scrap value from the machinery from this investment in year 5 is expected to be £400,000

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Year | 1 | 2 | 3 | 4 | 5 |
| Sales volume (units) | 100,000 | 120,000 | 110,000 | 90,000 | 70,000 |

AB plc’s cost of capital is 10% and it requires a payback of 2.75 years for this investment.

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:**

**(a) The payback and NPV of the investment. [12 marks]**

**(b) Advice AB plc on the financial viability of the investment and**

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