# S6 BAFS Practice Paper (4): Marginal Costing and Cost-Volume-Profit Analysis, Absorption Costing and Stock Profit Difference, Cash Budget, Ratio Analysis, Limited Company Depreciation and Allowance for Doubtful Debts, Direct Material Price and Usage Variances (100 marks)

S6 Business, Accounting and Financial Studies | 100 marks | 75 minutes

## Question 1: Marginal Costing and Cost-Volume-Profit Analysis

*A product sells for $80 per unit; unit variable cost is $48 and annual fixed costs are $256,000.*

Calculate the unit contribution margin. *(5 marks)*

Calculate the break-even sales volume in units. *(5 marks)*

How many units must be sold to earn a profit of $96,000? *(5 marks)*

If actual sales are 12,000 units, what is the margin of safety percentage? Briefly explain it. *(5 marks)*

## Question 2: Absorption Costing and the Stock-Related Profit Difference

*A company produced 10,000 units and sold 8,000 units this period with no opening stock. Total fixed production overhead was $150,000, absorbed on units produced.*

Calculate the fixed production overhead absorption rate per unit. *(4 marks)*

What is the closing stock in units? *(3 marks)*

Calculate the profit difference between absorption costing and marginal costing, and state which shows the higher profit. *(5 marks)*

Explain the cause of the difference. *(4 marks)*

## Question 3: Preparing a Cash Budget

*A business had opening cash of $12,000. During the period cash sales were $60,000, receipts from receivables $45,000, payments to suppliers $52,000, wages $18,000 and loan repayment $10,000; depreciation of $6,000 was also charged.*

What were total cash receipts for the period? *(4 marks)*

What were total cash payments for the period? *(4 marks)*

Calculate the closing cash balance for the period. *(5 marks)*

Why is depreciation of $6,000 excluded from the cash budget? Explain. *(5 marks)*

## Question 4: Ratio Analysis

*A company has current assets of $480,000 (including stock of $180,000) and current liabilities of $240,000; revenue is $1,200,000, gross profit $360,000 and net profit $96,000.*

Calculate the current ratio. *(4 marks)*

Calculate the quick (acid test) ratio. *(4 marks)*

Calculate the gross profit margin. *(4 marks)*

Calculate the net profit margin and compare what the two ratios show about profitability. *(4 marks)*

## Question 5: Depreciation and Allowance for Doubtful Debts

*A limited company bought a machine for $600,000 with an estimated residual value of $60,000 and a useful life of 5 years, depreciated on a straight-line basis. Closing trade receivables are $250,000 and an allowance for doubtful debts of 4 per cent is required.*

Calculate the annual depreciation charge. *(4 marks)*

What is the net book value of the machine after three years? *(4 marks)*

Calculate the allowance for doubtful debts and the net trade receivables. *(3 marks)*

If the allowance rose from 4 to 6 per cent, what would be the effect on this period's profit? *(3 marks)*

## Question 6: Direct Material Price and Usage Variances

*Standard cost: 3 kg of material per unit at a standard price of $8 per kg. Actual output was 4,000 units using 12,600 kg at an actual price of $8.20 per kg.*

What is the standard material quantity for actual output? *(4 marks)*

Calculate the material price variance and state whether it is favourable or adverse. *(4 marks)*

Calculate the material usage variance and state whether it is favourable or adverse. *(4 marks)*

Calculate the total material variance. *(4 marks)*