S5 Business, Accounting and Financial Studies Practice Paper: Accounting Equation and Trial Balance, Depreciation, Inventory and Gross Profit, Financial Ratios, Cost-Volume-Profit Analysis, Budgeting and Cash Flow

S5 | Business, Accounting and Financial Studies | Time: 75 minutes | Total: 100 marks | 24 questions

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Part A - Accounting Equation and Trial Balance (20 marks)

Give all answers in dollars and show your working.

1. A company has total assets of 850,000 dollars and total liabilities of 320,000 dollars. Find its capital. [5]

Answer: Capital = assets - liabilities = 850,000 - 320,000 = 530,000 dollars.

2. Using the figures above, the year profit is 96,000 dollars and drawings are 54,000 dollars. Find the closing capital. [5]

Answer: Closing capital = 530,000 + 96,000 - 54,000 = 572,000 dollars.

3. A company has non-current assets of 600,000 dollars, current liabilities of 150,000 dollars, non-current liabilities of 170,000 dollars and capital of 530,000 dollars. Find its current assets and total assets. [5]

Answer: Current assets = 530,000 + 150,000 + 170,000 - 600,000 = 250,000 dollars; total assets = 600,000 + 250,000 = 850,000 dollars.

4. Trade receivables are 480,000 dollars and an allowance for doubtful debts is made at 2.5%. Find the allowance and the net receivables. [5]

Answer: Allowance = 480,000 x 2.5% = 12,000 dollars; net receivables = 480,000 - 12,000 = 468,000 dollars.

Part B - Depreciation (18 marks)

Give percentages to two decimal places and amounts to the nearest dollar.

5. A machine costs 240,000 dollars, has an estimated residual value of 24,000 dollars and a useful life of 5 years. Find the annual depreciation using the straight-line method. [5]

Answer: Annual depreciation = (240,000 - 24,000) / 5 = 43,200 dollars.

6. The same machine is depreciated at 20% a year on the reducing-balance method. Find the depreciation for the first and second years. [5]

Answer: Year 1 = 240,000 x 20% = 48,000 dollars; year 2 = (240,000 - 48,000) x 20% = 38,400 dollars.

7. Using the straight-line method, find the net book value of the machine after three years. [4]

Answer: Accumulated depreciation = 43,200 x 3 = 129,600 dollars; net book value = 240,000 - 129,600 = 110,400 dollars.

8. The machine is sold at the end of year 3 for 100,000 dollars when its net book value is 110,400 dollars. Find the gain or loss on disposal. [4]

Answer: Loss on disposal = 110,400 - 100,000 = 10,400 dollars.

Part C - Inventory and Gross Profit (16 marks)

Give ratios to two decimal places and turnover periods to one decimal place, using 365 days a year.

9. Opening inventory is 60,000 dollars, purchases are 300,000 dollars and closing inventory is 80,000 dollars. Find the cost of goods sold. [4]

Answer: Cost of goods sold = 60,000 + 300,000 - 80,000 = 280,000 dollars.

10. If sales are 400,000 dollars, find the gross profit and the gross profit margin. [4]

Answer: Gross profit = 400,000 - 280,000 = 120,000 dollars; margin = 120,000 / 400,000 x 100 = 30%.

11. Find the inventory turnover in times. [4]

Answer: Average inventory = (60,000 + 80,000) / 2 = 70,000 dollars; turnover = 280,000 / 70,000 = 4 times.

12. Find the inventory turnover period in days. [4]

Answer: Turnover period = 365 / 4 = 91.25 days, about 91.3 days.

Part D - Financial Ratios (16 marks)

Give ratios to two decimal places and percentages to one decimal place, using the data in Parts A and C.

13. Current assets are 250,000 dollars and current liabilities are 150,000 dollars. Find the current ratio. [4]

Answer: Current ratio = 250,000 / 150,000 = 1.67.

14. Inventory is 80,000 dollars. Find the quick ratio. [4]

Answer: Quick ratio = (250,000 - 80,000) / 150,000 = 1.13.

15. Total liabilities are 320,000 dollars and total assets are 850,000 dollars. Find the gearing ratio. [4]

Answer: Gearing ratio = 320,000 / 850,000 x 100 = 37.6%.

16. Profit is 96,000 dollars and sales are 400,000 dollars. Find the net profit margin. [4]

Answer: Net profit margin = 96,000 / 400,000 x 100 = 24%.

Part E - Cost-Volume-Profit Analysis (16 marks)

Give units as whole numbers and amounts in dollars.

17. A product sells for 120 dollars a unit and has a variable cost of 72 dollars a unit. Find the unit contribution. [4]

Answer: Unit contribution = 120 - 72 = 48 dollars.

18. Fixed costs are 96,000 dollars. Find the break-even sales volume in units. [4]

Answer: Break-even volume = 96,000 / 48 = 2,000 units.

19. To earn a profit of 48,000 dollars, how many units must be sold and what is the sales revenue? [4]

Answer: Required volume = (96,000 + 48,000) / 48 = 3,000 units; revenue = 3,000 x 120 = 360,000 dollars.

20. If budgeted sales are 3,000 units, find the margin of safety in units, in dollars and as a percentage. [4]

Answer: Margin of safety = 3,000 - 2,000 = 1,000 units, which is 1,000 x 120 = 120,000 dollars, or 33.3%.

Part F - Budgeting and Cash Flow (14 marks)

The cash budget must show opening cash, receipts, payments and closing cash.

21. Budgeted sales are 2,000 units in January and 2,500 units in February at 120 dollars each. Find the sales budget for both months. [3]

Answer: January = 2,000 x 120 = 240,000 dollars; February = 2,500 x 120 = 300,000 dollars.

22. Credit sales are collected 70% in the month of sale and 30% in the following month. Find the cash collected in February. [4]

Answer: February receipts = 240,000 x 30% + 300,000 x 70% = 72,000 + 210,000 = 282,000 dollars.

23. Opening cash is 50,000 dollars and February payments are 250,000 dollars. Find the closing cash for February. [4]

Answer: Closing cash = 50,000 + 282,000 - 250,000 = 82,000 dollars.

24. The company requires a minimum cash balance of 100,000 dollars. Find the borrowing needed in February. [3]

Answer: Borrowing needed = 100,000 - 82,000 = 18,000 dollars.
