S4 Business, Accounting and Financial Studies Practice Paper: Accounting Cycle and Double Entry, Ledgers and Trial Balance, Adjusting Entries, Financial Statements, Ratio Analysis, Inventory Valuation and Depreciation (100 marks)

S4 | Business, Accounting and Financial Studies | Time: 75 minutes | Total: 100 marks | 24 questions

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Section A The Accounting Cycle and Double Entry

Part A: 4 marks each, 16 marks in total.

1. A business has total assets of $850,000 and total liabilities of $310,000 at the year end. Using the accounting equation, calculate its capital and state the equation. [4]

Answer: Capital = Assets - Liabilities = $850,000 - $310,000 = $540,000. The accounting equation is: Assets = Capital + Liabilities.

2. State which two types of account are increased by a debit entry and which two types of account are increased by a credit entry in double entry bookkeeping. [4]

Answer: A debit increases asset and expense accounts; a credit increases liability, capital and revenue accounts. Every transaction is recorded with equal debits and credits, so the books always stay in balance.

3. A business buys office equipment for $48,000 cash. Write the journal entry required and explain the effect of this transaction on the accounting equation. [4]

Answer: Entry: debit Office equipment $48,000 and credit Cash $48,000. Total assets are unchanged because one asset increases while another decreases, and capital and liabilities are also unchanged, so the accounting equation still holds.

4. List the five main steps of the accounting cycle and state where the trial balance fits in that cycle. [4]

Answer: The five steps are: analyse transactions, record in the journal, post to the ledger, prepare the trial balance and prepare the financial statements. The trial balance is prepared after posting and before the financial statements, to check that total debits equal total credits.

Section B Ledgers, Journals and the Trial Balance

Part B: 4 marks each, 16 marks in total.

5. The following balances are extracted: cash $120,000 (Dr), inventory $95,000 (Dr), equipment $210,000 (Dr), trade receivables $68,000 (Dr), rent expense $45,000 (Dr), trade payables $88,000 (Cr), bank loan $150,000 (Cr) and capital $300,000 (Cr). Calculate the debit and credit totals of the trial balance. [4]

Answer: Total debits = 120,000 + 95,000 + 210,000 + 68,000 + 45,000 = $538,000; total credits = 88,000 + 150,000 + 300,000 = $538,000. The two totals agree, so the trial balance balances.

6. Does a balanced trial balance prove that the books are completely correct? Give two types of error that can still exist when the trial balance balances. [4]

Answer: No. Errors such as an error of principle (capital expenditure treated as revenue expenditure), a complete omission of a transaction, an error of original entry with the same wrong amount on both sides, and compensating errors leave the trial balance in balance.

7. A business wrongly records $6,000 of repair parts purchased as office equipment. Identify the type of error and state whether the trial balance will still balance. [4]

Answer: This is an error of principle because an expense has been treated as an asset. The debit side still receives $6,000, only the account name is wrong, so total debits and credits remain equal and the trial balance still balances.

8. A business paid rent of $5,400 but recorded only $4,500 in the rent expense account; the cash account was correctly recorded. Write the journal entry needed to correct the error. [4]

Answer: Rent expense is understated by $900 (5,400 - 4,500). Correcting entry: debit Rent expense $900 and credit Suspense account $900, because cash was already recorded correctly.

Section C Adjusting Entries: Accruals, Prepayments and Depreciation

Part C: 4 marks each, 16 marks in total.

9. The December electricity bill of $8,000 is still unpaid at the year end. Write the adjusting entry and explain its effect on the financial statements. [4]

Answer: Adjusting entry: debit Electricity expense $8,000 and credit Accrued expenses $8,000. Expenses in the income statement increase by $8,000 and profit falls by $8,000; current liabilities rise by $8,000, which follows the accrual basis.

10. A business paid insurance of $24,000 on 1 October for twelve months; the year end is 31 December. Calculate the prepaid insurance at the year end and write the adjusting entry. [4]

Answer: Three months (October to December) have expired, so 9 months remain prepaid. Prepaid insurance = $24,000 x 9 / 12 = $18,000. Adjusting entry: debit Prepaid insurance $18,000 and credit Insurance expense $18,000.

11. A machine costs $180,000 with an estimated residual value of $20,000 and a useful life of 8 years. Calculate the annual depreciation using the straight-line method and write the depreciation entry for the first year. [4]

Answer: Annual depreciation = ($180,000 - $20,000) / 8 = $20,000. Entry: debit Depreciation expense $20,000 and credit Accumulated depreciation - machine $20,000.

12. Equipment costs $200,000 and is depreciated at 25% per annum on the reducing balance method. Calculate the depreciation for the first and second years and the net book value at the end of the second year. [4]

Answer: Year 1 depreciation = $200,000 x 25% = $50,000.0; year 2 depreciation = ($200,000 - $50,000.0) x 25% = $37,500.0. Net book value at the end of year 2 = $200,000 - $50,000.0 - $37,500.0 = $112,500.0.

Section D Preparing Financial Statements

Part D: 4 marks each, 16 marks in total.

13. Sales $620,000 with sales returns $20,000; opening inventory $45,000, purchases $380,000, purchase returns $5,000 and closing inventory $60,000. Calculate the cost of sales and the gross profit. [4]

Answer: Net sales = $620,000 - $20,000 = $600,000. Cost of sales = opening inventory + purchases - purchase returns - closing inventory = $45,000 + $380,000 - $5,000 - $60,000 = $360,000. Gross profit = $600,000 - $360,000 = $240,000.

14. Using the previous result, gross profit is $240,000 and operating expenses total $150,000. Calculate the net profit and state which equity item it is transferred to. [4]

Answer: Net profit = gross profit - operating expenses = $240,000 - $150,000 = $90,000. It is transferred to retained profits and increases owner equity.

15. At the year end: non-current assets $500,000, current assets $260,000, non-current liabilities $180,000 and current liabilities $130,000. Calculate total assets, total liabilities and capital. [4]

Answer: Total assets = $500,000 + $260,000 = $760,000; total liabilities = $180,000 + $130,000 = $310,000; capital = $760,000 - $310,000 = $450,000.

16. Why must accruals and prepayments be adjusted before the financial statements are prepared? Explain with reference to the accrual basis. [4]

Answer: The accrual basis records revenue and expenses in the period in which they are earned or incurred, not when cash moves. Without adjustments, profit and the statement of financial position would be misstated, for example unrecorded accrued expenses overstate profit and understate liabilities.

Section E Ratio Analysis

Part E: 4 marks each, 16 marks in total.

17. Net sales are $600,000 and gross profit is $240,000. Calculate the gross profit ratio and state the formula. [4]

Answer: Gross profit ratio = gross profit / net sales x 100% = $240,000 / $600,000 x 100% = 40.0%.

18. Net sales are $600,000 and net profit is $90,000. Calculate the net profit ratio and explain how it relates to the gross profit ratio. [4]

Answer: Net profit ratio = net profit / net sales x 100% = $90,000 / $600,000 x 100% = 15.0%. It is lower than the gross profit ratio because the difference is the share of operating expenses in net sales (40.0% - 15.0% = 25.0%).

19. Current assets are $260,000 including inventory of $60,000, and current liabilities are $130,000. Calculate the current ratio and the quick ratio, correct to two decimal places. [4]

Answer: Current ratio = $260,000 / $130,000 = 2.00 : 1; quick ratio = ($260,000 - $60,000) / $130,000 = $200,000 / $130,000 = 1.54 : 1.

20. Net profit is $90,000 and capital employed (total assets less total liabilities) is $450,000. Calculate the return on capital employed and explain whether a rise in this ratio is always good news. [4]

Answer: Return on capital employed = $90,000 / $450,000 x 100% = 20.0%. A rise usually means the capital is used more efficiently, but it can also come from cutting investment or essential spending, so risk and long term growth must also be considered.

Section F Inventory Valuation and Depreciation Methods

Part F: 5 marks each, 20 marks in total.

21. Inventory purchases: 100 units at $10 each, 200 units at $12 each and 150 units at $14 each; 300 units were sold during the period. Using FIFO, calculate the cost of sales and the closing inventory. [5]

Answer: Under FIFO the earliest units are sold first: cost of sales = 100 x $10 + 200 x $12 = $3,400; closing inventory = 150 x $14 = $2,100.

22. Using the same data (450 units costing $5,500 in total), calculate the weighted average unit cost, the cost of sales and the closing inventory, correct to two decimal places. [5]

Answer: Weighted average unit cost = $5,500 / 450 = $12.22; cost of sales = 300 x $12.22 = $3,666.67; closing inventory = 150 x $12.22 = $1,833.33.

23. Equipment costs $120,000 with a four year life and no residual value. Calculate the first two years of depreciation under the straight-line method and under the reducing balance method at 40% per annum, and state the net book value at the end of year two under the reducing balance method. [5]

Answer: Straight-line depreciation = $120,000 / 4 = $30,000 each year. Reducing balance: year 1 $48,000.0 and year 2 $28,800.0; net book value at the end of year 2 = $120,000 - $48,000.0 - $28,800.0 = $43,200.0.

24. Does depreciation mean the market value of the asset has fallen? Explain the purpose of depreciation, why accumulated depreciation is deducted from cost, and compare the early life expense under the straight-line and reducing balance methods. [5]

Answer: Depreciation is not a revaluation; it allocates cost over the periods that benefit from it, following the matching principle. Accumulated depreciation is the cost already consumed, so cost less accumulated depreciation gives the net book value of unexpired cost, not market value. In the early years the reducing balance method charges a higher depreciation expense than the straight-line method.
