S6 BAFS Practice Paper

S6 | Business, Accounting and Financial Management | Time: 75 minutes | Total: 100 marks | 24 questions

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Part A Financial Statement Adjustments and Depreciation

Show all workings; amounts in dollars.

1. (5 marks) A machine costs $480000 with an estimated residual value of $30000 and a useful life of 5 years. Find (a) annual depreciation under the straight-line method; (b) first-year depreciation under the reducing-balance method at 40% per year.

Answer: (a) (480000 − 30000) ÷ 5 = $90000; (b) 480000 × 40% = $192000.

2. (4 marks) Year-end receivables are $250000; bad debts of $8000 were written off during the year; the allowance policy is 2% of receivables; the opening allowance had a credit balance of $3000. Find the required closing allowance and the increase for the year.

Answer: Receivables after write-off: 250000 − 8000 = $242000; allowance required: 242000 × 2% = $4840; increase over $3000 = $1840, charged to this year.

3. (4 marks) Opening inventory $62000, purchases $318000, closing inventory $74000, sales $510000. Find cost of goods sold, gross profit and gross profit margin.

Answer: Cost of goods sold: 62000 + 318000 − 74000 = $306000; gross profit: 510000 − 306000 = $204000; margin: 204000 ÷ 510000 = 40%.

4. (5 marks) Rent paid was $132000 for the period 1 April to 31 March next year; the year end is 31 December. Electricity of $18000 for October to December is unpaid. Find this year rent expense, prepaid rent and total accrued expenses.

Answer: Nine months used: 132000 × 9 ÷ 12 = $99000; prepaid for 3 months: $33000; accrued electricity $18000; total expense 99000 + 18000 = $117000.

Part B Cost Accounting

Show workings; label variances F (favourable) or A (adverse).

5. (4 marks) Unit variable cost is $40, annual fixed production overhead is $120000 and normal capacity is 12000 units. Output was 12000 units and sales 10000 units. Find the fixed overhead absorbed per unit, closing stock in units, and the profit difference between absorption and marginal costing.

Answer: Per unit: 120000 ÷ 12000 = $10; closing stock 12000 − 10000 = 2000 units; difference 2000 × 10 = $20000, absorption profit higher as overhead is carried in stock.

6. (4 marks) Selling price $120, unit variable cost $72, fixed costs $240000. Find unit contribution, break-even sales volume, and the margin of safety in units and as a percentage when 6500 units are sold.

Answer: Contribution 120 − 72 = $48; break-even 240000 ÷ 48 = 5000 units; margin of safety 6500 − 5000 = 1500 units, i.e. 23.08%.

7. (4 marks) Standard: 3 kg per unit at $20 per kg. Output was 2000 units using 6300 kg costing $119700. Find the material price variance and usage variance.

Answer: Actual price 119700 ÷ 6300 = $19; price variance (20 – 19) × 6300 = $6300 F; standard usage 3 × 2000 = 6000 kg, usage variance (6000 – 6300) × 20 = $6000 A.

8. (4 marks) Completed output 8000 units; closing work in progress 2000 units, 40% complete for conversion (materials added at the start). Find equivalent units for materials and for conversion.

Answer: Materials: 8000 + 2000 = 10000 equivalent units; conversion: 8000 + 2000 × 40% = 8800 equivalent units.

Part C Financial Management and Ratio Analysis

Give ratios to 2 decimal places; amounts in dollars.

9. (4 marks) An investment of $500000 yields $160000 cash inflow each year for 4 years; the discount rate is 10% (4-year annuity factor 3.1699). Find the net present value and payback period, and advise whether to accept.

Answer: Present value 160000 × 3.1699 = $507184; NPV 507184 – 500000 = $7184 > 0, so accept; payback 500000 ÷ 160000 = 3.125 years.

10. (4 marks) Current assets $480000 (including inventory $210000) and current liabilities $300000. Find the current ratio and quick ratio, and comment on short-term liquidity.

Answer: Current ratio 480000 ÷ 300000 = 1.60; quick ratio (480000 – 210000) ÷ 300000 = 0.90; below 1, so liquidity relies on converting inventory to cash.

11. (4 marks) Profit before interest and tax $360000, interest $90000; debt $900000 and equity $1500000. Find interest cover and the debt-to-total-capital ratio.

Answer: Interest cover 360000 ÷ 90000 = 4 times; gearing 900000 ÷ 2400000 = 37.5%.

12. (4 marks) Profit after tax is $400000 and the dividend payout ratio is 40%. Find total dividends and retained profit; how much would retained profit fall if the payout ratio rose to 60%?

Answer: Dividends 400000 × 40% = $160000; retained profit $240000; at 60%, dividends $240000 and retained profit $160000, a fall of $80000.

Part D Accounting Principles and Financial Reporting

Name the concept; show workings for calculations.

13. (4 marks) A service was provided in December but the customer pays in January; the amount is still recognised as this year revenue. Name the concept applied and explain the effect on this year profit if a cash basis were used.

Answer: The accrual basis (accrual concept) applies; on a cash basis this year revenue and profit would be understated while the related cost is already recorded, mismatching revenue and expense.

14. (4 marks) Opening inventory 100 units at $10; purchases 200 units at $12; 250 units sold. Find cost of goods sold under FIFO and under the weighted average method.

Answer: FIFO: 100 × 10 + 150 × 12 = $2800; weighted average price 3400 ÷ 300 = $11.33, so cost of sales 250 × 11.33 = $2833.33; FIFO gives higher profit when prices rise.

15. (4 marks) A company spends $480000 replacing a machine and pays $12000 for routine maintenance of it. Classify each as capital or revenue expenditure and state the effect on this year profit.

Answer: The $480000 is capital expenditure, capitalised and depreciated over the years, so only the depreciation hits this year; the $12000 maintenance is revenue expenditure, charged in full, cutting profit by $12000.

16. (4 marks) Classify these as operating, investing or financing cash flows: issue of shares $800000, purchase of equipment $300000, dividends paid $120000, increase in inventory $40000.

Answer: Issue of shares $800000 is financing (inflow); equipment $300000 is investing (outflow); dividends $120000 is financing (outflow); inventory increase $40000 is operating (outflow).

Part E Business Operations and Decision Making

Support each decision with figures.

17. (4 marks) Compare a limited company with a sole proprietorship on (i) legal status, (ii) liability of owners, and (iii) ability to raise funds.

Answer: A company is a separate legal entity, shareholders liability is limited to their capital, and it can issue shares to raise funds; a sole proprietorship has no separate legal status, the owner is liable without limit, and funds are limited by personal assets.

18. (4 marks) Machine hours are limited to 1800 for the year. Product X earns $30 contribution per unit and needs 3 hours; product Y earns $16 and needs 2 hours. Find contribution per machine hour and state which product should be made first.

Answer: X: 30 ÷ 3 = $10 per hour; Y: 16 ÷ 2 = $8 per hour; X is higher, so make X first.

19. (4 marks) Annual demand is 9000 units, ordering cost $200 per order and holding cost $4 per unit per year. Use the EOQ formula to find the order size (whole units).

Answer: EOQ = $\sqrt{(2 \times 9000 \times 200 \div 4)} = \sqrt{900000} \approx 949$ units.

20. (4 marks) Credit sales are $3650000 and average receivables $500000. Find receivable days; if the credit policy is tightened to 45 days, how much cash would be released?

Answer: Receivable days 500000 × 365 ÷ 3650000 = 50 days; at 45 days receivables would be 3650000 × 45 ÷ 365 = $450000, releasing $50000.

Part F Integrated Analysis, Tax and Internal Control

Quote the figures; for ethics name the risk and the proper action.

21. (5 marks) PBIT is $360000, sales $3600000 and capital employed $2400000. Find the operating margin, asset turnover and return on capital employed, and verify the relationship.

Answer: Operating margin 360000 ÷ 3600000 = 10%; asset turnover 3600000 ÷ 2400000 = 1.5 times; ROCE 360000 ÷ 2400000 = 15%; indeed 10% × 1.5 = 15%.

22. (4 marks) Assessable profits are $1200000. Under the two-tiered profits tax rates, a corporation pays 8.25% on the first $2000000. Find the tax payable and the effective rate.

Answer: 1200000 × 8.25% = $99000; all profits fall within the first $2000000, so the effective rate is 8.25%.

23. (4 marks) A small company has one accountant who collects cash, records entries and performs bank reconciliations. State two internal control risks and one improvement.

Answer: Risk 1: the accountant can misappropriate cash and cover it with journal entries; risk 2: records and reconciliations can be altered, so the bank reconciliation gives no independent check. Improvement: separate duties, with the owner or another person collecting cash and reconciling the bank.

24. (5 marks) Before the year end the owner asks the accountant to leave an unpaid supplier account of $300000 out of the books to improve the current ratio. Identify the accounting and ethical issues and state what the accountant should do.

Answer: Omitting the liability misstates liabilities and the current ratio, breaching completeness, objectivity and the accrual basis, and amounts to false reporting; the accountant should refuse, record the liability, document the objection to management and escalate under the professional code if necessary.
