

FANLING LUTHERAN SECONDARY SCHOOL
2024–2025 S6 Mock Examination
BUSINESS, ACCOUNTING AND FINANCIAL STUDIES PAPER 2
Marking Scheme

SECTION A (38 marks)

1. (a) Total number of units available for sale = 1,000 units

Total cost of goods available for sale = $1,000 \times \$226 \times 95\% + \$7,300 = \$222,000$

Average cost per unit of goods = $\$222,000 / 1,000 = \222 per unit

NRV of damage inventory: = $\$150 \times 100 - \$6,000 = \$9,000$

According to the lower of cost and NRV, value of closing inventory = $700 \times \$222 + \$9,000 = \$164,400$

(b)

Shelby Ltd

Statement to calculate the cost of goods sold for the month ended 31 December 2024

	\$
Purchases ($\$1,000 \times 226 \times 95\%$)	214,700
Add: Carriage inwards	7,300
Less: Closing inventory	(164,400)
Cost of goods sold	57,600

- (c) — Prudence concept

— It means that when choosing among accounting alternatives and treatments, the best choice is the one which is least likely to overstate assets and income as well as understate liabilities and expenses.

— The company should adopt the lower of cost and net realisable value when performing inventory valuation.

— The loss on inventory written down to net realisable value (\$13,000) should be recognised in the income statement for the month ended 31 December 2024 and treated as part of the cost of goods sold.

(Total 8 marks)

2.

Cash book

Date	Details	Discount	Cash	Bank	Date	Details	Discount	Cash	Bank
2024		\$	\$	\$	2024		\$	\$	\$
Mar 1	Balance b/d		16,400		Mar 1	Balance b/d			4,590
Mar 3	Trade receivables	2,550		99,450	Mar 4	Trade payables			4,000
Mar 9	Trade payables		1,000		Mar 16	Drawings		9,600	
Mar 10	Sales		15,600		Mar 16	Bank		6,000	
Mar 16	Cash			6,000	Mar 21	Cash			25,000
Mar 21	Bank		25,000		Mar 21	Deposit to suppliers		2,000	
Mar 30	Rental deposit			30,000	Mar 21	Accrued operating expenses		23,000	
					Mar 25	Trade receivables		180	
					Mar 30	Trade payables	150	2,850	
					Mar 31	Balance c/d		14,370	101,860
		2,550	58,000	135,450			150	58,000	135,450

(Total 8 marks)

3. (a)

Amy and Bon
Appropriation account for the year ended 31 December 2024

	\$
Net profit	910,975
Add: Interest on drawings – Amy	10,375
	921,350
Less: Partner's salary – Bon (\$27,500 × 12)	330,000
	591,350
Share of profits:	
–Amy (2/5)	236,540
–Bon (3/5)	354,810
	591,350

Interest income before appropriation = \$42,350 – (\$225,000 × 6% × 3/12 + \$200,000 × 6% × 7/12) = \$31,975

Operating expenses before appropriation = \$3,015,000 \$27,500 × 9 = \$2,767,500

Net profit = \$5,003,250 – \$1,356,750 + \$31,975 – \$2,767,500 = \$910,975

- (b) Bon's salary for October to December 2024 remained unpaid on 31 December 2024 and thus the partnership owed Bon three months' salary for 2024, i.e. \$82,500. Therefore, the balance of Bon's current account as at 31 December 2024 should include the partners' salary of \$82,500.

- (c) Partner's drawings, interest on drawings, share of losses

(Total 8 marks)

4 (a)(i)

Allowance for doubtful accounts

2024		\$	2024		\$
Dec 31	Trade receivables	5,760	Jan 1	Balance b/d	93,408
Dec 31	Trade receivables	9,600	Dec 31	Trade receivables	6,240
Dec 31	Balance c/d (W1)	140,880	Dec 31	Bad debts	56,592
		156,240			156,240

W1: Allowance for Less than 31 days = (\$1,476,000 + \$12,000) × 1% = \$14,880

Allowance for 31 – 60 days = (\$354,000 - \$27,600) × 10% + \$27,600 × 100% = \$60,240

Allowance for 61 – 100 days = \$304,800 × 20% = \$60,960

Allowance for Over 100 days = (\$14,400 – \$9,600) × 100% = \$4,800

Allowance for doubtful account for over 2024 = \$14,880 + \$60,240 + \$60,960 + \$4,800 = \$140,880

(a)(ii)

Bad debts

2024		\$	2024		\$
Dec 31	Allowance for doubtful accounts	56,592	Dec 31	Profit and loss	56,592

- (b) Prudence concept and matching principle

(Total 8 marks)

5. Contribution per unit of Product X = \$266 – \$48 – \$150 – \$8 = \$60/unit
- Contribution per unit of Product Y = \$230 – \$48 – \$120 – \$30 – \$8 = \$24/unit
- Direct labour hour required for each unit of X = \$150/\$30 = 5 hours
- Direct labour hour required for each unit of Y = \$120/\$30 = 4 hours
- Contribution per direct labour hour of each unit of X = \$60/5 = \$12/direct labour hour
- Contribution per direct labour hour of each unit of Y = \$24/4 = \$6/ direct labour hour
- Production priority: 1st: Product X, 2nd: Product Y
- Direct labour hours needed for the production of A: 56,000×10 = 560,000 direct labour hours
- Direct labour hour required for each unit of Z = \$90/\$30 = 3 direct labour hours
- Direct labour hours needed for the production of Z: 4,000 x 3 = 12,000 direct labour hours
- Remaining direct labour hours to produce X and Y = 600,000 560,000 12,000 = 28,000 direct labour hours
- Direct labour hours needed for the production of X: 4,000 x 5 = 20,000 direct labour hours
- Remaining direct labour hours for the production of Y = 28,000 – 20,000 = 8,000 direct labour hours
- Number of units of Y to be manufactured: = 8,000 / 4 = 2,000 units
- The number of units of X to be manufactured for company X: 4,000 units
- The number of units of Y to be manufactured for company Y: 2,000 units
- The number of units of Z to be manufactured for company Z: 4,000 units

(Total 6 marks)

乙部 (32 分)

6. (a)

Cash

	\$		\$
Balance b/d	6,144	Cash loss	5,640
Sales (\$26,370 × 12) (i)	316,440	Rent (\$109,440 + \$2,160) (iii)	111,600
Trade receivables (W1) (ii)	655,656	Selling and distribution expenses (\$13,188 – \$588 – \$600) (iii)	12,000
Disposal: machinery (iv)	36,000	Other operating expenses (iii)	248,040
		Purchases (v)	144,000
		Drawings (v)	24,000
		Cash at bank (v)	467,544
		Balance c/d	1,416
	<u>1,014,240</u>		<u>1,014,240</u>

Cash at bank

	\$		\$
Balance b/d	72,456	Trade payables	457,200
Sales	467,544	Machinery	33,000
		Selling and distribution expenses	600
		Balance c/d	49,200
	<u>540,000</u>		<u>540,000</u>

W1

Trade receivables

	\$		\$
Balance b/d	64,800	Cash (bal figure)	655,656
Sales	747,360	Discounts allowed	24,000
		Allowance for doubtful accounts (W2)	10,464
		Balance c/d	122,040
	<u>812,160</u>		<u>812,160</u>

Average trader receivables = (\$64,800 + \$122,040) ÷ 2 = \$93,420

(\$93,420 / Credit sales) × 12 = 1.5

Credit sales = \$93,420 × 12 / 1.5 = 747,360

W2

Allowance for doubtful accounts

	\$		\$
Trade receivables (bal figure)	10,464	Balance b/d	9,000
Balance c/d (\$122,040 × 5%)	6,102	Bad debts	7,566
	<u>16,566</u>		<u>16,566</u>

(b)

David**Income statement (extract) for the year ended 31 March 2025**

	\$	\$
Sales [\$316,440 + \$747,360]		1,063,800
Less: Cost of goods sold		
Opening inventory (bal figure)	36,960	
Add: Purchases [\$144,000 + \$462,000 (W3)]	606,000	
	642,960	
Less: Abnormal inventory loss	32,400	
Less: Closing inventory	19,560	591,000
Gross profit		<u>472,800</u>

Cost of goods sold × (1 + 80%) = \$1,063,800

Cost of goods sold = \$1,063,800 / (1 + 80%) = \$591,000

W3 :

Trade payables

	\$		\$
Cash at bank	457,200	Balance b/d	32,400
Balance c/d	37,200	Purchases (bal figure)	462,000
	<u>494,400</u>		<u>494,400</u>

(Total 12 marks)

7 (A) (a)

Statement to calculate the retained profits as at 31 December 2024

	\$	\$
Retained profits, 1 January 2024		2,640,000
Add: Net profit after tax (\$964,800 – \$4,800)		960,000
		3,600,000
Less: Dividend: ordinary shares	108,000	
Dividend: preference shares	216,000	324,000
Retained profits, 31 December 2024		3,276,000

(b)(1) $(\$1,200,000 + \$1,200,000) + \$1,800,000 = \$4,200,000$

$(\$1,200,000 + \$1,200,000) + (\$1,800,000 + \$2,910,000) + \$3,276,000 = \$10,386,000$

Gearing ratio = $\$4,200,000 / \$10,386,000 \times 100\% = 40.44\%$

(b)(2) Profit before interest and tax = $(\$964,800 - \$4,800) + \$270,000 + \$1,200,000 \times 6\% + 1,200,000 \times 2\% = \$1,326,000$

Capital employed of 2023: $(\$1,200,000 + \$1,200,000) + (\$1,800,000 + \$2,910,000) + \$2,640,000 = \$9,750,000$

Capital employed of 2024: $(\$1,200,000 + \$1,200,000) + (\$1,800,000 + \$2,910,000) + \$3,276,000 = \$10,386,000$

Average capital employed: $(\$9,750,000 + \$10,386,000) / 2 = 10,068,000$

Return on capital employed = $(\$1,326,000 / \$10,068,000) \times 100\% = 13.17\%$

(b)(3) Earnings per share = $[(\$964,800 - \$4,800) - \$108,000] / (\$2,910,000 \div \$2) = \$0.59 / \text{share}$

(b)(4) Dividend cover for ordinary shares (in times) = $[(\$964,800 - \$4,800) - \$108,000] / \$216,000 = 3.94 \text{ times}$

(B) (c) – The liquidity of Gold Ltd. was better than other companies in the same industry.

– The inventory turnover ratio was higher than the industry average, indicating that the company could sell its inventory at a faster rate and the flow and replenishment of inventory was faster compared with other companies in the same industry.

– The trade receivables turnover ratio was higher than the industry average, indicating that the company was more efficient in turning trade receivables into cash compared to other companies in the same industry.

(Total 12 marks)

8. (A) (a) Production unit = $13,440 + 3,360 = 16,800 \text{ units}$

Selling price per unit = $\$3,360,000 / 13,440 = \250

Variable cost per unit = $(\$420,000 + \$400,000 + \$140,000 + \$300,000) / 16,800 + \$336,000 / 13,440 = \100

Contribution per unit = $\$250 - \$100 = \$150$

Contribution margin ratio = $\$150 / \$250 \times 100\% = 60\%$

(b) Total fixed cost = $(1,302,000 - \$15,000) + \$504,000 = \$1,791,000$

Breakeven sales quantity = $\$1,791,000 / \$150 = 11,940 \text{ units}$

(B) (c)

Upgrade the outdated machine

	\$
Cost to upgrade the outdated machine	(1,520,000)
Decrease in variable manufacturing costs ($\$756,000 \times 4$)	3,024,000
Scrap value	150,000
Incremental profit/Cost saving	1,654,000

Replace the outdated machine with an advanced model

	\$
Cost of the new machine ($\$3,000,000 + \$30,000 + \$50,000$)	(3,080,000)
Decrease in variable manufacturing costs ($\$84,000 \times 12 \times 4$)	4,032,000
Scrap value of the new machine	7,000
Scrap value of the old machine	210,000
Incremental profit/Cost saving	1,169,000

As the incremental profit of upgrading the outdated machine (\$1,654,000) is higher than that of replacing the outdated machine (\$1,169,000), PP Ltd. should upgrade the outdated machine.

(Total 10 marks)

丙部 (18 分)

9. (a)

HK Ltd.
Income statement for the year ended 31 December 2024

	\$	\$
Sales		3,971,480
Less: Cost of goods sold (\$1,040,660 + \$3,000 + \$240)		1,043,900
Gross profit		2,927,580
Add: Interest income (\$120,000 × 3% × 3/12)		900
		2,928,480
<u>Less: Expenses</u>		
Selling and distribution expenses	646,860	
Administrative expenses	974,000	
Debenture interest (\$600,000 × 5% × 9/12)	22,500	
Bad debts (W1)	119,538	
Depreciation expense (W2)	401,120	2,164,018
Net profit		764,462

W1: Allowance for doubtful account = (\$1,825,000 + \$360,000 – \$8,400) × 3% + \$8,400 = \$73,698

Bad debts = \$73,698 + \$45,840 = \$119,538

W2: Depreciation expenses = \$4,257,000 – \$3,575,880 – \$280,000 = \$401,120

(b)

HK Ltd.
Statement to calculate the retained profits as at 31 December 2024

	\$
Retained profits, 1 January 2024	764,462
Add: Net profit	1,697,340
	2,461,802
Less: Final dividend for 2023: ordinary shares (\$5,000,000 ÷ \$2 × \$0.05)	125,000
Retained profits, 31 December 2024	2,336,802

(c)

HK Ltd.
Statement of financial position as at 31 December 2024

	\$	\$	\$
ASSETS			
<u>Non-current assets</u>			
Property, plant and equipment, at cost			4,257,000
Less: Accumulated depreciation (\$3,575,880 + \$401,120)			3,977,000
			280,000
<u>Current assets</u>			
Inventory (\$191,240 – \$3,000 – \$240)		188,000	
Trade receivables (\$1,825,000 + \$360,000)	2,185,000		
Less: Allowance for doubtful accounts	73,698	2,111,302	
Bank (\$7,468,272 – \$630,000 + \$121,500)		6,959,772	9,259,074
Total assets			9,539,074
EQUITY AND LIABILITIES			
<u>Equity</u>			
Ordinary share capital (\$5,000,000 + \$1.8 × 120,000)			5,216,000
Retained profits			2,336,802
			7,552,802
<u>Current liabilities</u>			
Trade payables		1,717,272	
Share application monies refundable (\$1.8 × 80,000)		144,000	
Dividend payable		125,000	1,986,272
Total equity and liabilities			9,539,074

(Total 18 marks)

10. (a)

	The Journal	Dr	Cr
items	Detail	\$	\$
(i)	Returns inwards (\$5,700×2)	11,400	
	Suspense		11,400
(ii)	Trade payables	790	
	Suspense		790
	Cash	7,900	
	Trade receivables		7,900
(iii)	Donation expenses	16,000	
	Purchases		8,000
	Suspense		8,000
(iv)	Accumulated depreciation: machinery	21,534	
	Machinery (new)	1,560	
	Machinery (old)		23,088
	Profit on disposal		6
	Machinery (new) (\$30,000×0.88 – \$1,560)	24,840	
	Accounts payables (\$26,400 – \$24,840)	1,560	
	Purchases		26,400
	Depreciation expenses: machinery	3,522	
	Accumulated depreciation: machinery		3,522
(v)	Trade receivables	72,000	
	Suspense		72,000
(vi)	Subscription fee income	358,000	
	Unearned income		358,000
(vii)	Allowance for doubtful accounts	16,077	
	Bad debts		16,077

(b)

Suspense					
2024		\$	2024		\$
Dec 31	Difference as per trial balance	92,190	Dec 31	Returns inwards	11,400
				Trade payables	790
				Donation expenses	8,000
				Trade receivables	72,000
		92,190			92,190

(c) Error of original entry

(Total 18 marks)