FANLING LUTHERAN SECONDARY SCHOOL

2021–2022 S6 Mock Examination

BUSINESS, ACCOUNTING AND FINANCIAL STUDIES PAPER 2

Marking Scheme

SECTION A (24 marks)

1. (a)

	$		$
Selling price			50
Direct material ($4 + $7 + $3.5 + $3 + $4.5)	22		
Direct labour ($60 × 5/60)	5		
Variable manufacturing overheads	1		
Variable selling and distribution expenses	2		30
Contribution margin per box			20

	$		$
售價			50
直接原料 ($4 + $7 + $3.5 + $3 + $4.5)	22		
直接人工 ($60 × 5/60)	5		
變動製造間接成本	1		
變動銷售及分銷費用	2		30
每盒邊際貢獻			20

(b) Break-even sales in boxes

= Fixed cost/Unit contribution margin

= $2,200,000/$20

= 110,000 boxes

(b) 損益兩平銷售數量

= 固定成本/單位邊際貢獻

= $2,200,000/$20

= 110,000 盒

(c)

Special order accepted	$		$
Selling price			130.00
Direct material [($4 + $7 + $3.5) x 2 + ($3 + $4.5) x 1.1]	37.25		
Direct labour	5.00		
Variable manufacturing overheads	1.00		
Variable selling and distribution expenses ($2 x 25%)	0.50		43.75
Contribution margin per box			86.25

接受特價訂單	$		$
售價			130.00
直接原料[($4 + $7 + $3.5) x 2 + ($3 + $4.5) x 1.1]	37.25		
直接人工	5.00		
變動製造間接成本	1.00		
變動銷售及分銷費用($2 x 25%)	0.50		43.75
每盒邊際貢獻			86.25

(c) Net Profit from Special Order

= Total Contribution Margin – Purchase cost of the specialized machine

= 90,000 x $86.25 – $3,750,000

= $4,012,500

As the company will not reach full production capacity even if the factory accepts the special order. It should therefore accept the special order as this will increase the net profit by $4,012,500.

(b) 特價訂單的淨利

= 總邊際貢獻 – 專用機器的購買成本

= 90,000 x $86.25 – $3,750,000

= $4,012,500

即使接受特價訂單，企業的生產仍未到達其最高產量。企業應該接受該特價訂單，因為工廠的淨利將會因此而增加$4,012,500。

2 (a) (i) Average trade receivable collection period (in day) in 2018

= ($900,000 + $629,500)÷2/($48,343,125 x 80%) x 365 days = 7.22 days

Average trade receivable collection period (in day) in 2019

= ($629,500 + $486,000)÷2/($44,555,000 x 80%) x 365 days = 5.71 days

(ii) Acid test ratio in 2018

= [($22,162,000 – $14,825,000) – $5,865,500] / $635,300 : 1 = 2.32 : 1

Acid test ratio in 2019

= [($20,582,000 – $13,901,000) – $5,932,500] / $557,650 : 1 = 1.34 : 1

(b) The average trade receivable collection period of IDEA is the same as that of Price Correct.

The acid test ratio of IDEA is higher than that of Price Correct.

IDEA's liquidity performance is better than Price Correct in 2019.

(c) Earnings per share = ($1,795,000 – $639,000 – $26,000)/841,000 = $1.34

Price-earnings ratio = $26 / $1.34 = 19.35 times

2 (a) (i) 2018 年平均賒銷期限(日)

= ($900,000 + $629,500)÷2/($48,343,125 x 80%) x 365 日 = 7.22 日

2019 年平均賒銷期限(日)

= ($629,500 + $486,000)÷2/($44,555,000 x 80%) x 365 日= 5.71 日

(ii) 2018 年酸性測驗比率

= [($22,162,000 - $14,825,000) – $5,865,500] / $635,300 : 1 = 2.32 : 1

2019 年酸性測驗比率

= [($20,582,000 – $13,901,000) – $5,932,500] / $557,650 : 1 = 1.34 : 1

(b) IDEA 的平均賒銷期限與 Price Correct 相同。

IDEA 的酸性測驗比率高於 Price Correct。

在 2019 年，IDEA 的變現能力較 Price Correct 好。

(c) 每股盈利 = ($1,795,000 – $639,000 – $26,000)/841,000 = $1.34

市盈率 = $26 / $1.34 = 19.35 倍

3 (a) Realisation

The realization concept states that revenue should be recognized in the period when goods are sold or when services are rendered to the customers.

Mary can only recognize $750,000 as his sales revenue during the year. Any subscriptions received in advance should not be recognized as revenue but be treated as current liability as unearned revenue. No services had been rendered for the remaining 3,500 lessons.

= 1,500 lessons x $500 = $750,000

Prudence

Prudence concept requires that accountants should exercise a degree of caution in the adoption of policies and significant estimates such that the assets and income of the entity are not overstated whereas liability and expenses are not understated.

However, unless there was strong and objective evidence of the existence of future benefit, the company should write off the expenditure in the period in which it was incurred based on the prudence concept because of the uncertainties involved like how long the benefits of the campaign will last, the effectiveness of the advertising campaign, the quality of the product, the strength of the competition, etc.

SECTION B (24 marks)

4. (a) (i) Trade receivables = $190,000 – $17,000 = $173,000

Working capital ratio = ($128,000 + $364,000 + $173,000) / ($90,000 + $15,000 + $202,000) : 1 = 2.17 : 1

(ii) Cost of goods sold = $136,500 + $778,050 – $364,000 = $550,550

inventory turnover = $550,550 / [($136,500 + $364,000) / 2] = 2.20 times

(iii) Credit sales = $780,000 – $17,000 = $763,000

average trade receivables collection period = [($110,000 + $173,000) / 2] / $763,000 x 365 days= 67.69 days

(iv) Credit purchases = $778,050 x 80% = $622,440

average trade payables repayment period = [($58,000 + 202,000) / 2] / $622,440 x 365 days= 76.23 days

(b) (i) gearing ratios of 2016 = $753,800 / ($753,800 + $200,000 + $42,000) x 100% = 75.70%

Retained profits of 2017 = $158,000 – $17,000 = $141,000

gearing ratios for 2017 = $180,000 / ($180,000 + $700,000 + $141,000) x 100% = 17.63%

(ii) — The solvency has improved in 2017

— The company issued ordinary share capital during 2017

— The company repaid a large portion of long term loan during 2017

(Total 12 marks)

5. (a) Net book value of Property = $2,500,000 – $300,000 = $2,200,000

Net book value of Equipment = $1,000,000 – $150,000 = $850,000

(b) (i)

Revaluation

	$		$
Equipment ($850,000 × 20%)	170,000	Property ($2,500,000 × 120% – $2,200,000)	800,000
Allowance for doubtful accounts (W1)	112,000		
Gain on revaluation —			
Capital: Amy	259,000		
Capital: Bobby	259,000		
	800,000		800,000

Allowance for doubtful accounts = $1,480,000 × 10% = $148,000

Increase in bad debts / increase in allowance for doubtful accounts：$148,000 – $36,000 = $112,000

(ii)

Capital

	Amy	*Bobby*	*Carol*		*Amy*	*Bobby*	*Carol*
	$	$	$		$	$	$
Goodwill (W4)	210,000	140,000	70,000	Balances b/d	2,500,000	1,500,000	–
Balances c/d	2,759,000	1,829,000	455,000	Revaluation: gain	259,000	259,000	–
				Goodwill (W4)	210,000	210,000	–
	–			Cash at bank	–	–	70,000
	–			Trade payables	–	–	455,000
	2,969,000	1,969,000	525,000		2,969,000	1,969,000	525,000

Goodwill Adjustment		
Partner	Goodwill shared in old ratio	Goodwill shared in new ratio
Amy	(1/2) $210,000	(3/6) $210,000
Bobby	(1/2) $210,000	(2/6) $140,000
Carol	—	(1/6) $70,000

(c)

Profit and loss appropriation

	$		$
Interest on capital —		Profit and loss	1,380,150
Current: Amy ($2,759,000 × 5%)	137,950		
Current: Bobby ($1,829,000 × 5%)	91,450		
Current: Carol ($455,000 × 5%)	22,750		
Partner's salary —			
Current: Carol	480,000		
Share of profits —			
Current: Amy	324,000		
Current: Bobby	216,000		
Current: Carol	108,000		
	1,380,150		1,380,150

(Total 12 marks)

6 (A) Opportunity cost is the cost which measures the best opportunity that is sacrificed when the choice of one course of action requires that an alternative be forgone. In other words, the opportunity cost of making a decision is the highest-valued alternative forgone.

(B) (a) Number of Product X manufactured for the year：1,500 + 1,300–300 = 2,500 件

(b) Contribution per unit of Product X：

= ($7,500,000 ÷ 1,500) – ($1,440,000 + $760,000 + $80,000) ÷ 2,500–($300,000 ÷ 1,500)

= $3,888 / unit

(c) Breakeven sales quantity：[($1,850,000 + $100,000) + $400,000 + $760,400] ÷ $3,888 = 800 units

(d) The margin of safety by percentage = (1,500 – 800) ÷ 1,500 × 100% = 46.67%

(e) The contribution margin ratio of Product X = $3,888/$5,000 = 77.76%

The contribution margin ratio of Product Y = ($1,200,000 – $300,000) ÷ $1,200,000 = 75%

(d)

	XYZ		*OPQ*
	$		$
Total contribution(W1); (W2)	6,998,400		6,750,000
Less Fixed costs	(3,110,400)		(900,000)
Net profit	3,888,000		5,850,000

XYZ Company will perform better in terms of total contribution margin. OPQ Company will perform better in terms of net profit.

(W1) $9,000,000 × 77.76% = $6,998,400

(W2) $9,000,000 x 75% = $6,750,000

(W3) Total fixed cost of XYZ company = $1,850,000 + $100,000 + $400,000 + $760,400 = 3,110,400

(Total 12 marks)

SECTION C (20 marks)

7 (a)

	The Journal		
	Details	Dr	Cr
		$	$
(i)	Suspense	555	
	Profit and loss — Interest expense		500
	Profit and loss — Interest revenue		55
(ii)	Trade payables	600	
	Suspense		600
(iii)	Suspense	800	
	Bank		800
	Bank	500	
	Suspense		500
(iv)	Profit and loss —Purchase	1,000	
	Profit and loss — Inventory loss		1,000
	Profit and loss — Cost of goods sold [$3,000 – ($2,000 – $120)]	1,120	
	Inventory		1,120
(v)	Trade payables — Ben Limited ($45,000 × 2)	90,000	
	Trade receivables — Ben Limited		90,000
(vi)	Trade receivables	16,000	
	Deposit received	4,000	
	Profit and loss —Sales [$8,000 × (1 + 150%)]		20,000
(vii)	Trade receivables ($6,500 + $8,000)	14,500	
	Allowance for doubtful accounts		14,500
	Allowance for doubtful accounts	14,500	
	Profit and loss —Bad debts		14,500
	Alternative answer:		
	Trade receivables	14,500	
	Profit and loss - Bad debts recovered		6,500
	Profit and loss - Bad debts		8,000
(viii)	Profit and loss —Increase in allowance for doubtful accounts (Workings)	10,240	
	Allowance for doubtful accounts		10,240
(ix)	Machinery	4,000	
	Profit and loss — Freight expense		1,000
	Profit and loss — Installation expense		3,000
	Profit and loss : Depreciation expense [($1,000 + $3,000) × 15% × $^{5}/_{12}$]	250	
	Accumulated depreciation: Machinery		250

Adjusted trade receivables：$500,000 – $90,000 + $16,000 +$14,500 = $440,500

Increase in allowance for doubtful accounts：$440,500 × 8% – $500,000 × 5% = $10,240

(b)

Suspense

	$		$
Profit and loss	555	Difference as per trial balance	255
Bank	800	Trade payables	600
		Bank	500
	1,355		1,355

(Total 20 marks)

8 (a)

Cash at Bank

	$		$
Balance b/d	340,850	Trade receivables (ii)	30,000
Trade payables — Alien Co (i)	20,000	Trade receivables (iii)	4,000
Trade payables — Donny Co (i)	15,000	Trade receivables (iv)	18,000
Dividend income (v)	1,000	Interest expense (vi) ($200,000 × 5% ÷ 2)	5,000
		Suspense (vii)	44,000
		Short-term deposit (viii) {[($60,000 × 3% × $^{6}/_{12}$) +$60,000] ÷ 2}	30,450
		Balance c/d	245,400
	376,850		376,850

(b)

Chan Company
Bank Reconciliation Statement as at 31 December 2021

			$
Balance as per bank statement (balancing figure)			183,400
Add *Uncredited cheques:*			
#32887 (ii)	70,000		
#32888 (ii)	25,000		95,000
			278,400
Less *Unpresented cheques:*			
#25778 (i)	12,000		
#25779 (i)	18,000		30,000
Less Bank error (ix)			3,000
Balance as per updated cash at bank account [from (a)]			245,400

(c) A bank reconciliation statement is used to explain the difference between the balance of the bank account (i.e., the current account) in the cash book and the balance shown on the bank statement at a given date, thus reassuring the owner of the company and auditors that the difference is explicable and that there were genuine reasons for it.

(d) (i) Cheque #25777

(ii) Cheque #32779

(Total 20 marks)