FANLING LUTHERAN SECONDARY SCHOOL
2022-2023 First Term Uniform Test

S.6 BUSINESS, ACCOUNTING & FINANCIAL STUDIES

Marking Scheme

SECTION A (38 marks)

1.

Appropriation account

	$	$		$
Interest on capital –			Profit and loss (net profit)	100,000
Current: Tsui ($60,000x10%)		6,000	Interest on drawings –	
Current: Chong ($80,000x10%)		8,000	Current: Tsui ($20,000x8%x3/12)	400
Salary to partner –			Current: Chong ($30,000x8%x3/12)	600
Current: Chong		20,000		
Share of profit –				
Current: Tsui (2/5)	26,800			
Current: Chong (3/5)	40,200	67,000		
		101,000		101,000

Current

	Tsui	Chong		Tsui	Chong
	$	$		$	$
Drawing	20,000	30,000	Balance b/d	40,000	50,000
Appropriation–Interest on drawings	400	600	Appropriation–Interest on capital	6,000	8,000
Balance c/d	52,400	87,600	Appropriation–Salary to partner	—	20,000
			Appropriation–Share of profit	26,800	40,200
	72,800	118,200		72,800	118,200

(Total 10 marks)

2.

Revaluation

	$	$		$
Motor vehicles ($80,000 – $30,000)		50,000	Buildings ($280,000 – $100,000)	180,000
Allowance for doubtful accounts		5,000	Trade receivables (bad debts recovery)	2,000
Cash at bank – Professional fees		12,000		
Profit on revaluation –				
Capital: Cai (1/2)	57,500			
Capital: Li (1/2)	57,500	115,000		
		182,000		182,000

Capital

	Cai	Li	Chan		Cai	Li	Chan
	$	$	$		$	$	$
Goodwill (5 : 3 : 2)	100,000	60,000	40,000	Balances b/f	120,000	180,000	—
Balance c/f	177,500	277,500	30,000	Goodwill (1 : 1)	100,000	100,000	—
				Cash at bank	—	—	70,000
				Revaluation	57,500	57,500	—
	277,500	337,500	70,000		277,500	337,500	70,000

(Total 10 marks)

3. (a)

Realisation

	$	$		$
Office equipment		30,000	Bank – Office equipment	36,000
Motor vehicles		40,000	Bank – Inventory	60,000
Inventory		50,000	Bank – Trade receivable	24,000
Trade receivable		10,000	Capital: Hui - Motor vehicles taken over	44,000
Bank – Dissolution costs		3,000	Trade payable – Discounts received	1,000
Profit on realization –				
Capital：Hui (1/8)	4,000			
Capital：Luo (3/8)	12,000			
Capital：Wong (4/8)	16,000	32,000		
		165,000		165,000

(b)

Capital

	Hui	Luo	Wong		Hui	Luo	Wong
	$	$	$		$	$	$
Realisationr	44,000	—	—	Balances b/f	70,000	30,000	40,000
Bank–Final settlement	34,000	47,000	63,000	Current	4,000	5,000	7,000
				Realisation	4,000	12,000	16,000
	78,000	47,000	63,000		78,000	47,000	63,000

Bank

	$		$
Balances b/f	37,000	Trade payable	10,000
Realisation–Office equipment	36,000	Realisation–Dissolution costs	3,000
Realisation–Inventory	60,000	Capital: Hui–Final settlement	34,000
Realisation–Trade receivable	24,000	Capital: Luo–Final settlement	47,000
		Capital: Lee–Final settlement	63,000
	157,000		157,000

(Total 18 marks)

Section B (79 marks)

1. (a) mixed cost

   (b) opportunity cost

   (c) sunk cost

   (d) fixed cost

   (e) variable cost

(Total 10 marks)

2. (a) The contribution margin for each unit of the product = $100 – $7 – $8 – $9 – $20 = $56

   (b) Total fixed cost = $150,000 + $100,000 = $250,000

   Target profit sales unit = ($250,000 + $30,000) / $56 = 5,000 units

   Target profit sales revenues = 5,000 x $100 = $500,000

   (c) Unit contribution after the price change = $200 – $7 – $8 – $9 – $20 = $156

   Net profit before the price change = $30,000

   Net profit after the price change = 2,000 x $156 – $250,000 = $62,000

   Cheung's Co should increase the price as the net profit would increase $32,000 after the change.

(Total 12 marks)

3. (a) Contribution margin per unit for products A = 365 – 80.5 – 60.5 – 24.0 – 21.5 = $178.5 per unit

   Contribution margin per unit for products B = 390 – 95.0 – 61.0 – 24.5 – 21.5 = $188 per unit

   Contribution margin per unit for products C = 225 – 45.5 – 40.0 – 20.5 – 21.5 = $97.5 per unit

   (b) Fixed manufacturing overheads absorption rate per machine hour = $440,000/20,000 = $22 per machine hour

   (c) The number of machine hours for each unit of products A = $55.0/$22 = 2.5 machine hour

   The number of machine hours for each unit of products B = $88.0/$22 = 4 machine hour

   The number of machine hours for each unit of products C = $33.0/$22 = 1.5 machine hour

   (d) Contribution margin per machine hour for each unit of products A = $178.5 / 2.5 = $71.4 per machine hour

   Contribution margin per machine hour for each unit of products B = $188 / 4 = $47 per machine hour

   Contribution margin per machine hour for each unit of products C = $97.5 / 1.5 = $65 per machine hour

   Therefore, production priority should be products A, products C and products B.

   1. Produce 4,500 units of products A, machine hours used = 4,500 x 2.5 = 11,250

   2. Produce 4,300 units of products C, machine hours used = 4,300 x 1.5 = 6,450

   Machine hours left for producing product B = 20,000 – 4,500 x 2.5 – 4,300 x 1.5 = 2,300 machine hours

   The number of product B to be produced = 2,300 / 4 = 575 units

   Optimum production plan : 1. Produce 4,500 units of products A

   2. Produce 4,300 units of products C

   3. Produce 575 units of products B

(Total 30 marks)

4. (a) (i)

Income statement for Humble Co for the year ended 31 December 2018

Sales [(15,200 x 95%) × $350]			5,054,000
Less: Cost of goods sold:			
Direct materials	1,337,600		
Direct labour ($25 x 3.5 x 15,200)	1,330,000		
Variable manufacturing overheads (15,200 x $12)	182,400		
Fixed manufacturing overheads	438,000		
	3,288,000		
Less: Closing inventory [($3,288,000/15,200) × 760]	(164,160)		(3,119,040)
Gross profit			1,934,960
Less: Variable marketing costs [(15,200 x 95%) × $25]			(361,000)
Fixed marketing costs ($200,000 × 4)			(800,000)
Net profit			773,960

(ii)

Income statement for Humble Co for the year ended 31 December 2018

Sales [(15,200 x 95%) × $350]			5,054,000
Less: Variable cost of goods sold:			
Direct materials	1,337,600		
Direct labour ($25 x 3.5 x 15,200)	1,330,000		
Variable manufacturing overheads (15,200 x $12)	182,400		
	2,850,000		
Less: Closing inventory [(2,850,000/15,200) × 760]	(142,500)		(2,707,500)
Product contribution margin			2,346,500
Less : Variable marketing costs [(15,200 x 95%) × $25]			(361,000)
Contribution			1,985,500
Less: Fixed manufacturing overheads			(438,000)
Fixed marketing costs ($200,000 × 4)			(800,000)
Net profit			747,500

(c) Fixed manufacturing costs are sunk costs and therefore not relevant to decision making, but those costs are treated as product costs in absorption costing.

Income statements prepared under marginal costing are more useful for decision making. For example, they can be used to predict the change in net profit if the sales volume changes by a certain percentage.

(Total 27 marks)