HONG KONG INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS

AND

HONG KONG ASSOCIATION FOR BUSINESS EDUCATION

HONG KONG DIPLOMA OF SECONDARY EDUCATION EXAMINATION 2017/18

BUSINESS, ACCOUNTING AND FINANCIAL STUDIES MOCK EXAMINATION

PAPER 2A ACCOUNTING MODULE

SUGGESTED ANSWER

SECTION A

Question 1

(a)

	$	
Sales (950 x $100 + 1,000 x $105)	200,000	**0.5**
Less: Total cost ($75,000 + $78,000)	153,000	**0.5**
Net profit for the two months ended 30 November 2017	47,000	

Alternative answer:

Net profit for October 2017 (950 x $100 - $75,000)	20,000	**0.5**
Net profit for November 2017 (1,000 x $105 - $78,000)	27,000	**0.5**
Net profit for the two months ended 30 November 2017	47,000	

<1 mark>

(b)

Variable cost per unit = $\frac{\$78,000 - \$75,000}{1,000 \text{ units} - 950 \text{ units}}$ = $60 per unit **0.5 + 0.5**

Contribution margin per unit = $100 - $60 = $40 **1.5**

Contribution margin ratio (in %) = $\frac{\$40}{\$100}$ x 100% = 40% **2**

<2 marks>

(c)

Fixed cost = $75,000 - $60 x 950 or $78,000 - $60 x 1,000 = $18,000 **0.5**

Contribution margin per unit = $105 - $60 = $45 **1**

Breakeven point (in units) = $\frac{\$18,000}{\$45}$ = 400 units

OR Breakeven point (in $) = 400 x $105 = $42,000 **2**

Margin of safety (in %) = $\frac{1,000 \text{ units} - 400 \text{ units}}{1,000 \text{ units}}$ x 100% = 60% **3**

<3 marks>

<Total: 6 marks>

Question 2

Allowance for Doubtful Accounts

	2015		$	2015		$	
0.5	Dec 31	Profit and loss	3,160	Jan 1	Balance b/d	23,500	**0.5**
0.5	Dec 31	Balance c/d[1]	20,340				
			23,500			23,500	
	2016			2016			
0.5	Dec 31	Balance c/d[2]	33,012	Jan 1	Balance b/d	20,340	
				Dec 31	Profit and loss	12,672	**0.5**
			33,012			33,012	
	2017			2017			
0.5	Dec 31	Profit and loss	6,112	Jan 1	Balance b/d	33,012	
1	Dec 31	Balance c/d[3]	26,900				
			33,012			33,012	

Workings:

(1) $(525,000–16,500)x4%

(2) $(472,400–59,750)x8%

(3) $200,000x5% + $120,000x7% + $50,000x9% + $40,000x10%

<4 marks>
<Total: 4 marks>

Question 3

(a) Depreciation charge for the year 2017

	$	
Cost of machine		
Listed Price	660,000	
Less: Trade discount (20%)	132,000	
	528,000	**0.5**
Add: Freight charges	8,500	**0.5**
Design fee	12,000	**0.5**
Testing fee	9,500	**0.5**
Labour and overheads installation	10,600	**0.5**
	568,600	**0.5**

Depreciation charge = ($568,600 – $8,600)/5 **(½)** x 3/12 **(½)** = $28,000 **(1)**

<4 marks>

(b) Costs

Direct materials	Variable cost	**0.5**
Direct wages	Variable cost	**0.5**
Depreciation	Fixed cost	**0.5**
Town gas	Semi-variable cost	**0.5**

<2 marks>

(c) Costs at 80,000 units

	$	
Direct materials	1,040,000	**0.5**
Direct wages	560,000	**0.5**
Depreciation	28,000	**0.5**
Town gas	90,000	**0.5**
	1,718,000	

Town gas
Variable cost per unit = ($85,000 - $75,000)/ (70,000 - 50,000) = $0.5
Total fixed cost = $85,000 - $0.5*70,000 = $50,000

Alternative answer

	Variable cost per unit		Total costs if 80,000 units a quarter	
Variable cost	$		$	
Direct materials	13.0			
Direct wages	7.0			
Town gas	0.5			
	20.5	X 80,000 units	1,640,000	**1**
Fixed cost				
Depreciation			28,000	**0.5**
Town gas			50,000	**0.5**
			1,718,000	

<2 marks>
<Total: 8 marks>

Question 4

(a) Bank loans

Statement of Financial Position
• Shown as a non-current liability **(1)**

Preference shares

Statement of Financial Position
• Shown as part of equity/share capital **(1)**

<2 marks>

(b) The effect of issuing 500,000 new ordinary shares at $1 each:

	Increase	**Decrease**	**No effect**	**Amount $**	
General reserve			✓		**0.5**
Ordinary share capital	✓			500,000	**0.5**
Retained profits			✓		**0.5**
Bank	✓			500,000	**0.5**

<2 marks>

(c) Identify the accounting concept the company must comply with.

i. Materiality – value of stock of loose tools and stationery were usually insignificant and should be better treated as an expense / should not be treated as non-current asset. **(1)**

ii. Consistency – depreciation method should not be changed for better asset value. **(1)**

<2 marks>

<Total: 6 marks>

Question 5

(a)

	$	
Materials	120	
Labour	70	
Prime cost	190	**0.5**
Variable production overheads ($10 x 2)	20	**0.5**
Fixed production overheads ($\frac{\$400,000}{5,000}$ x 2)	160	**0.5**
Product cost per unit	370	**0.5**

<2 marks>

(b)

<u>Income Statement for November 2017 under Absorption Costing</u>

	$	$	
Sales ($470 x 2,300)		1,081,000	**0.5**
Less: Production costs of units completed ($370 x 2,400)	888,000		**0.5**
Less: Closing inventory ($370 x 100)	37,000		**0.5**
	851,000		
Add: Fixed production overheads under-absorbed ($400,000 - $160 x 2,400 or $384,000)	16,000		**1**
Production costs of goods sold		867,000	
Gross profit		214,000	
Less: Variable selling and administrative expenses ($15 x 2,300)	34,500		**0.5**
Fixed selling and administrative expenses	132,000	166,500	**0.5**
Net profit		47,500	**0.5**

<4 marks>

(c)

	$	
Fixed production overheads	400,000	
Variable selling and administrative expenses ($15 x 2,300)	34,500	
Fixed selling and administrative expenses	132,000	
Period cost under marginal costing	566,500	**1**

<1 mark>

(d)

The reported <u>net profit</u> for November 2017 under absorption costing <u>is higher</u> than that under marginal costing. **1**

It is because **production volume is greater than the sales volume** and a **greater amount of** <u>fixed production overheads</u> is <u>included in closing inventory</u> and <u>carried forward to next accounting period</u>. **1**

<2 marks>

(e)

<u>Cost-Benefit Analysis Approach</u>

	$	
Total contribution margin under the proposal*		
[($470 x 95% - $190 - $20 - $15 - $16) x ($\frac{5,600}{2}$ + 100)]	595,950	**1**
Total contribution margin without the proposal		
[($470 - $190 - $20 - $15) x 2,300]	563,500	**1**
Increase in total contribution margin	32,450	
Less: Promotors' basic salaries ($9,000 x 3)	27,000	**0.5**
Increase in net profit	5,450	

<u>Alternative answer:</u>

Increase in contribution margin on additional sales*		
[($470 x 95% - $190 - $20 - $15 - $16) x ($\frac{5,600}{2}$ +100 – 2,300)]	123,300	**1**
Less: Decrease in contribution margin on existing sales		
[($470 x 5% + $16) x 2,300]	90,850	**1**
Increase in total contribution margin	32,450	
Less: Promotors' basic salaries ($9,000 x 3)	27,000	**0.5**
Increase in net profit	5,450	

*Although sales volume can be increased by 30%, i.e. 2,990 units (2,300 units x 130%), the maximum number of machine hours is only 5,600 which can produce 2,800 units ($\frac{5,600 \text{ hours}}{2 \text{ hours}}$) at maximum. With the opening inventory of 100 units included, the maximum sales volume would be 2,900 units.

Since there is an <u>increase in net profit</u>, the Marketing Manager's proposal <u>should be accepted</u>. **0.5**

<3 marks>

OR

Income Statement Approach

Income Statement for December 2017 under Marginal Costing (Under new proposal)

	$	$	
Sales ($470 x 95% x 2,900)		1,294,850	**0.5**
Less: Variable production costs of units sold:			
Variable production costs of opening inventory ($210 x 100)	21,000		
Variable production cost of units produced ($210 x 2,800)	588,000	609,000	
Product contribution		685,850	
Less: Variable selling and administrative expenses ($16 + $15) x 2,900		89,900	**0.5**
Contribution		595,950	
Less: Fixed production overheads	400,000		
Fixed selling and administrative expenses	132,000		**0.5**
Promotors' basic salaries	27,000	559,000	
Net profit		36,950	**0.5**

Income Statement for December 2017 under Marginal Costing (Without new proposal)

	$	$	
Sales ($470 x 2,300)		1,081,000	
Less: Variable production costs of units sold:			
Variable production costs of opening inventory ($210 x 100)	21,000		
Variable production costs of units produced ($210 x 2,200)	462,000	483,000	
Product contribution		598,000	
Less: Variable selling and administrative expenses ($15 x 2,300)		34,500	
Contribution		563,500	
Less: Fixed production overheads	400,000		
Fixed selling and administrative expenses	132,000	532,000	
Net profit		31,500	**0.5**

Since there is an increase in net profit ($36,950 - $31,500 = $5,450), the Marketing Manager's proposal should be accepted. **0.5**

(3)

<Total: 12 marks>

Question 6

(a)

	2016	2017
(i)	$57 300 ÷ $386 500 x 100% = 14.83% **[0.5]**	$45 900(wk 1) ÷ $(466 980 – 22 500) x 100% = $45 900 **(½)** ÷ 444 480 **(½)** x 100% = 10.33 % **[1.5]**
(ii)	$(25 500 + 77 300 + 120 000) ÷ ($36 600 + $83 000) = $222 800 ÷ $119 600 = 1.86 : 1 **[0.5]**	$[(36 700 + 15 000) + (55 000 - $22 500) + 89 300)] ÷ $[(76 000 + 48 000 + 5900)] = $173 500 **(½)** ÷ $129 900 **(½)** = 1.34 : 1 **[1.5]**
(iii)	$[(19 760 + 36 600)/2] ÷ 228 650 x 12 = $28 180 ÷ $228 650 x 12 = 1.48 months **[0.5]**	$[(36 600 + 76 000 + $5900) /2] ÷ $(253 830 + 5900) x 12 = $59 250 **(½)** ÷ $259 730 **(½)** x 12 = 2.74 months **[1]**
(iv)	$220 750 ÷ [$(17 600 + 25 500) / 2] = $220 750 ÷ $21 550 = 10.24 times **[0.5]**	$(242 630 + 5900 – 15 000) ÷ [(25 500 + 36 700 + 15 000) / 2] = $233 530 **(½)** ÷ $38 600 **(½)** = 6.05 times **[1]**

<7 marks>

Working 1

Net profit for 2017 = $59 300 - $5900 [Omission of purchase] - $22 500 [Overstatement of sales] + $15 000 [Understatement of closing inventory]
= $45 900

Correcting entries for errors

		Dr	Cr
(iii)	*Purchases*	*5 900*	
	Trade payable		*5 900*
(iv)	*Sales*	*22 500*	
	Inventory	*15 000*	
	Trade receivable		*22 500*
	Profit and loss		*15 000*

(b i)

The liquidity of the company deteriorated **(1)** as the current ratio dropped from 1.86 times to 1.34 times. It indicated that the company was less able to repay its short-term liabilities out of its current assets in the year. **(1)**

The deterioration of the liquidity was due to the extension of repayment period to trade creditors from 1.48 months to 2.74 months. **(1)** Also, the inventory turnover slowed down in the year as the inventory turnover rate decreased from 10.24 times to 6.05 times in 2017. **(1)**

(Any three points of the above, 1 mark for each point, max. 3 marks)

<3 marks>

(b ii)

Limitations of ratio analysis

i. Information may not be timely

ii. Ignorance of qualitative factors

iii. Different accounting policies between companies

(Any two points of the above, 1 mark for each point, max. 2 marks)

<2 marks>

<Total: 12 marks>

Question 7

(a)

Revaluation

2017		$	2017		$	$	
Dec 31	Furniture and fixtures	70,000	Dec31	Loss on revaluation —			**1**
Dec 31	Inventory	1,600		Capital: Au $(^2/_4)$	36,000		**1**
Dec 31	Allowance for doubtful account	400		Capital: Lau $(^1/_4)$	18,000		**1**
				Capital: Wong $(^1/_4)$	18,000	72,000	
		72,000				72,000	

<3 marks>

(b)

Capital

2017		*Au* $	*Lau* $	*Wong* $	*Ho* $	2017		*Au* $	*Lau* $	*Wong* $	*Ho* $	
Dec 31	Capital a/c:					Dec 31	Balances b/f	300,000	150,000	100,000	—	**0.5**
	GW adj.				60,000	" 31	Capital a/c:					
" 31	Revaluation:						GW adj.		30,000	30,000	—	**1**
	Share of loss	36,000	18,000	18,000	—	" 31	Bank	—	—	—	50,000	**0.5**
" 31	Current a/c		72,000	22,000		" 31	Motor vehicles	—	—	—	100,000	**@0.5**
" 31	Balances c/d	270,000	90,000	90,000	90,000	" 31	Current a/c	6,000				**0.5**
		306,000	180,000	130,000	150,000			306,000	180,000	130,000	150,000	

Partner	Goodwill shared in old ratio	$	Goodwill shared in new ratio	$	Required adjustment		$
Au	$(^2/_4)$	180,000	$(^3/_6)$	180,000			
Lau	$(^1/_4)$	90,000	$(^1/_6)$	60,000	*Cr*	Capital: Lau	30,000
Wong	$(^1/_4)$	90,000	$(^1/_6)$	60,000	*Cr*	Capital: Wong	30,000
Ho	—	—	$(^1/_6)$	60,000	*Dr*	Capital: Ho	60,000
		360,000		360,000			

<4 marks>

(c)

Au, Lau, Wong and Ho
Statement of Financial Position as at 1 January 2018

	$	$	
Non-current assets			
Furniture and fixtures (at valuation)		400,000	**0.5**
Motor vehicles (net)		107,000	**0.5**
		507,000	
Current assets			
Inventory	13,400		**0.5**
Trade receivables (net)	13,100		**0.5**
Bank ($5,500 + $50,000)	55,500		**0.5**
	82,000		
Less ***Current liabilities***			
Trade payables	15,000		**0.5**
Net current assets		67,000	
		574,000	
Capital accounts			
Au	270,000		
Lau	90,000		
Wong	90,000		
Ho	90,000	540,000	**0.5**
Current accounts			
Au	(39,250)		**0.5**
Lau	80,625		**0.5**
Wong	(7,375)	34,000	**0.5**
		574,000	

<5 marks>

<Total: 12 marks>

Working:

Current

2017		*Au* $	*Lau* $	*Wong* $	*Ho* $	2017		*Au* $	*Lau* $	*Wong* $	*Ho* $
Dec31	Balance b/f			2,500		Dec31	Balances b/f	15,500	33,000		
" 31	Share of loss	63,750	31,875	31,875		" 31	Int on capital	15,000	7,500	5,000	
" 31	Capital	6,000				" 31	Capital		72,000	22,000	
" 31	Balances c/d		80,625			" 31	Balance c/f	39,250		7,375	
		69,750	112,500	34,375				69,750	112,500	34,375	

Question 8

(a)

Bank

	2017		$	2017		$	
		Balance b/d	87,500		Drawings	10,000	**0.5**
0.5		Cash	120,000		Operating expenses	350,000	**0.5**
0.5		Trade receivable	900,000		Administrative expenses	180,000	**0.5**
0.5		Disposal	50,000		Trade payable	890,000	**0.5**
		Balance c/d	272,500				
			1,430,000			1,430,000	

Cash

2017		$	2017		$	
	Balance b/d	6,000		Bank	120,000	**0.5**
	Sales: cash sales	156,482		Drawings	12,000	**0.5**
				Administrative expenses	22,500	**0.5**
				Balance c/d	7,982	
		162,482			162,482	

<5 marks>

(b)

Mr. Smith

Income statement for the year ended 31 December 2017

	$	$	$	
Sales ($963,500**(1)** + $156,482**(½)**)			1,119,982	**1.5**
Less: Returns inwards/Sales returns			25,000	**0.5**
			1,094,982	
Less: Cost of goods sold				
Opening inventory		80,000		
Add: Purchases	921,350			**1**
Less: Returns outwards/Purchases returns	16,500	904,850		**0.5**
		984,850		
Less: Closing inventory		27,000		**0.5**
		957,850		
Less: Inventory loss		175,720	782,130	**0.5**
Gross profit ($1,094,982 x 40% ÷ 140%)			312,852	
Add: Other income				
Discounts received			12,600	**0.5**
Profit on disposal			15,500	**0.5**
			340,952	
Less: Expenses				
Operating expenses		361,750		**0.5**
Administrative expenses		190,280		**0.5**
Discounts allowed		8,900		**0.5**
Bad debts		8,000		**0.5**
Inventory loss		175,720		**0.5**
Depreciation expenses				
- Premises		50,000		**0.5**
- Equipment [($250,000–$34,500)x25%]		53,875	848,525	**0.5**
Net loss			(507,573)	

<9 marks>

(c)

Mr. Smith
Statement of financial position as at 31 December 2017

	$	$	$	
Non-current assets				
Premises (net)			450,000	**0.5**
Equipment (net)			161,625	**0.5**
			611,625	
Current assets				
Inventory		27,000		**0.5**
Trade receivable		179,100		**0.5**
Prepaid administrative expenses		6,250		**0.5**
Cash		7,982		**0.5**
		220,332		
Less: ***Current liabilities***				
Trade payable	110,000			**0.5**
Accrued operating expenses	7,000			**0.5**
Bank overdraft	272,500	389,500		**0.5**
Net current liabilities			(169,168)	
			442,457	
Financed by:				
Capital			972,030	**0.5**
Less: Net loss			507,573	**0.5**
			464,457	
Less: Drawings			22,000	**0.5**
			442,457	

<6 marks>

<Total: 20 marks>

Workings:

Statement of affairs as at 1 January 2017

	$	$
Premises (net)		500,000
Equipment (net)		250,000
Inventory		80,000
Trade receivable		157,500
Bank		87,500
Cash		6,000
Prepaid operating expenses		4,750
		1,085,750
Trade payable	107,750	
Accrued administrative expenses	5,970	113,720
Capital		972,030

Premises

2017		$	2017		$
	Balance b/d	500,000		Depreciation	50,000
				Balance c/d	450,000
		500,000			500,000

Equipment

2017		$	2017		$
	Balance b/d	250,000		Disposal	34,500
				Depreciation	53,875
				Balance c/d	161,625
		250,000			250,000

Trade receivable

2017		$	2017		$
	Balance b/d	157,500		Bank	900,000
	Sales	963,500		Returns inwards	25,000
				Discounts allowed	8,900
				Bad debts	8,000
				Balance c/d	179,100
		1,121,000			1,121,000

Trade payable

2017		$	2017		$
	Bank	890,000		Balance b/d	107,750
	Returns outwards	16,500		Purchases	921,350
	Discounts received	12,600			
	Balance c/d	110,000			
		1,029,100			1,029,100

Operating expenses

2017		$	2017		$
	Prepaid b/d	4,750		Profit and loss	361,750
	Bank	350,000			
	Accrued c/d	7,000			
		361,750			361,750

Administrative expenses

2017		$	2017		$
	Bank	180,000		Accrued b/d	5,970
	Cash	22,500		Profit and loss	190,280
				Prepaid c/d	6,250
		202,500			202,500

Disposal

2017		$	2017		$
	Equipment	34,500		Bank	50,000
	Profit and loss	15,500			
		50,000			50,000

Drawings

2017		$	2017		$
	Bank	10,000			
	Cash	12,000			

Returns inwards

2017		$	2017		$
	Trade receivable	25,000			

Returns outwards

2017		$	2017		$
				Trade payable	16,500

Discounts allowed

2017		$	2017		$
	Trade receivable	8,900			

Discounts received

2017		$	2017		$
				Trade payable	12,600

Bad debts

2017		$	2017		$
	Trade receivable	8,000			

Question 9

(a)

Venus Company
Bank Reconciliation Statement as at 31 December 2017

	$	$	
Balance as per cash book before adjustment		89,000	
Add: (ii) Electricity payment overstated	7,150		**0.5**
(iii) Undercast of bank account	1,380		**0.5**
(viii) Credit transfer	3,820		**0.5**
(ix) Stale cheque	6,800		**0.5**
(ix) Unpresented cheque	5,730	24,880	**0.5**
		113,880	
Less: (vi) Credit sales wrongly recorded as deposit into bank	90,000		**0.5**
(vii) Omission of payment	3,520	93,520	**0.5**
Balance as per bank statement		20,360	**0.5**

<4 marks>

(b)

Venus Company
The Journal

Date	Details	Dr. $	Cr. $	
(i)	Suspense	19,000		**0.5**
	Trade receivable – Thomas		19,000	**0.5**
(ii)	Bank	7,150		**0.5**
	Suspense		7,150	**0.5**
(iii)	Bank	1,380		**0.5**
	Suspense	20,420		**0.5**
	Profit and loss – Returns inwards		21,800	**0.5**
(iv)	Profit and loss – Sales	77,000		**0.5**
	Trade receivable		50,000	**0.5**
	Deposit from customers		27,000	**1**
(v)	Profit and loss – Advertising expense	75,000		**1**
	Prepaid expense		75,000	**0.5**

Date	Details	Dr. $	Cr. $	
(vi)	Profit and loss – Sales	10,000		0.5
	Profit and loss – Discounts allowed		10,000	0.5
	Trade receivable – Mr. Fung	90,000		0.5
	Bank		90,000	0.5
(vii)	Accrued expense	3,520		0.5
	Bank		3,520	0.5
(viii)	Bank	3,820		0.5
	Trade receivable – Ronald Ltd		3,820	0.5
(ix)	Bank	6,800		0.5
	Trade payable		6,800	0.5

<12 marks>

(c)

Venus Company
Statement to adjust working capital as at 31 December 2017

	$	$	
Working capital/Net current assets before adjustment ($267 000–$152 000)		115,000	0.5
Add: (ii) Electricity payment overstated	7,150		0.5
(iii) Understatement of bank	1,380	8,530	0.5
		123,530	
Less: (i) Omission of trade receivable, Thomas	19,000		0.5
(iv) Overstatement of trade receivable	50,000		0.5
(iv) Omission of deposit from customers	27,000		0.5
(v) Overstatement of prepaid expense	75,000	171,000	0.5
Working capital/Net current liabilities after adjustment		(47,470)	0.5

<4 marks>

<Total: 20 marks>

~ End of Paper ~

