

**Business, Accounting and Financial Studies**

**Mock Exam Paper (Mar 2019)**

Paper 2A  
Accounting Module

Time allowed: 2 hours and 15 minutes

This paper must be answered in English.

**Instructions:**

- 1 There are THREE sections in this paper.
- 2 All questions in Sections A and B are compulsory. You are required to answer ONE of the two questions in Section C.

**SECTION A** (24 marks)

Answer **ALL** questions in this section.

- 1 Joyce Lau is a sole trader. Her business produces and sells a single product. The cost information related to the product is as follows:

Direct materials (per gram)	\$55
Direct labour (per hour)	\$100
Variable overheads (per unit produced)	\$200

The selling price of the product is \$2,000 per unit. Thirty minutes of direct labour and 20 grams of direct materials are to be used to produce a unit. The estimated demand for the product for the coming year is 4,400 units. Budgeted fixed overheads for the year amount to \$3,900,000.

**Required:**

- (a) Calculate the following for the current year:
- (i) Break-even sales in units (2 marks)
  - (ii) Contribution margin ratio (2 marks)
- (Calculations to two decimal places)
- (b) Suppose the estimated demand for the product decreases by a certain amount while other factors remain unchanged. How would this affect the break-even sales in units?

(1 mark)

(Total: 5 marks)

(a) (i)  $\text{Contribution margin} = \$2,000 - \$55 \times 20 - \$100 \times 30/60 - \$200 = \$650$

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$$\text{Break-even sales in units} = \$3,900,000 \div \$650 = 6,000 \text{ units}$$

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(ii)  $\text{Contribution margin ratio} = \$650 / \$2,000 \times 100\%$

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$$= 32.5\%$$

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- (b) No effect. The break-even sales in units would not be affected by the estimated sales level.

- 2 Chan, Lee and Cheung had been partners for 15 years, sharing profits and losses in the ratio of 40% : 40% : 20%. You are given the following information on the partnership for the year ended 31 December 2018:
- (i) The net profit for the year amounted to \$2,200,000.
  - (ii) Interest on capital was to be calculated based on the capital account balances at the beginning of the financial year. The interest rate applied was 2% per annum.
  - (iii) Chan and Lee were entitled to a monthly salary of \$10,000 and \$8,000, respectively.
  - (iv) Current account balances as at 1 January 2018: Chan \$30,000 *Cr*, Lee \$12,000 *Cr*, Cheung \$22,000 *Dr*. Interest at 5% per annum was to be charged on accounts with a debit balance at the beginning of the financial year.
  - (v) Capital account balances as at 1 January 2018: Chan \$1,400,000, Lee \$450,000, Cheung \$100,000.

**Required:**

Prepare for the partnership the appropriation account (vertical format) for the year ended 31 December 2018. (6 marks)

**Chan, Lee and Cheung  
Appropriation Account for the year ended 31 December 2018**

	\$	\$
Net profit		2,200,000
<i>Add</i> Interest on current account: Cheung ( $\$22,000 \times 5\%$ )		1,100
		2,201,100
<i>Less</i> Interest on capital: Chan ( $\$1,400,000 \times 2\%$ )	28,000	
Lee ( $\$450,000 \times 2\%$ )	9,000	
Cheung ( $\$100,000 \times 2\%$ )	2,000	39,000
Salaries to partners: Chan ( $\$10,000 \times 12$ )	120,000	
Lee ( $\$8,000 \times 12$ )	96,000	216,000
		1,946,100
Balance of profit shared: Chan (40%)	778,440	
Lee (40%)	778,440	
Cheung (20%)	389,220	1,946,100

- 3 Jason Wong operates a trading firm. On 15 December 2018, he found that one of the business's cash boxes was stolen. Upon investigation, he determined that the cash balance as at 30 November 2018 was \$12,345.

He also confirmed that the following cash transactions were made during the first two weeks of December 2018:

	\$
Receipts from trade debtors	59,630
Cash contributed by Jason	2,000
Payments to trade creditors	35,120
Cash purchases	1,250
Water and electricity fees paid in cash	600
Cash taken by Jason	5,000
Cash banked	5,500

Following the loss of the cash box, cash on hand amounted to \$1,234.

**Required:**

Prepare a statement to determine the amount of cash stolen.

(6 marks)

**Jason Wong  
Computation of Cash Stolen on 15 December 2018**

	\$	\$
Cash balance as at 30 November 2018		12,345
<i>Add</i> Receipts from trade debtors		59,630
Cash contributed by Jason		2,000
		73,975
<i>Less</i> Payments to trade creditors	35,120	
Cash purchases	1,250	
Water and electricity fees	600	
Drawings	5,000	
Cash banked	5,500	47,470
Cash balance as at 15 December 2018		26,505
<i>Less</i> Cash on hand		1,234
Cash stolen		25,271

- 4 Natalie Ho found that the following transactions were omitted from the books, after she had prepared an income statement and a statement of financial position for the year ended 31 December 2018. State how each of the following omitted events affected (increased/decreased/not affected) the net profit for the year and working capital as at the year-end date. The first one has been done for you as an example.

(7 marks)

	Net profit for the year ended 31 December 2018	Working capital as at 31 December 2018
<i>Example: Natalie Ho, owner of the firm, took cash of \$1,000 from the business on 12 December 2018.</i>	Not affected	Decreased
(a) Tom Co, a trade debtor, settled the account of \$1,000 by cheque. Natalie used the amount received to buy a gift for her daughter.	Not affected	Decreased
(b) On 3 January 2018, Natalie used her own money to pay the firm's water charges for the four months ended 31 December 2017.	Not affected	Increased
(c) On 5 February 2018, the electricity bill for Natalie's private apartment for the two months ended 31 January 2018 was paid for from the business bank account.	Not affected	Decreased
(d) A motor vehicle which was bought on 15 April 2006 was sold for \$8,000. The original cost and accumulated depreciation of the vehicle were both \$200,000.	Increased	Increased
(e) Bank interest revenue of \$100 was received on 31 December 2018.	Increased	Increased
(f) An inventory item with a cost of \$100 was damaged. It could only be sold for \$120 after \$100 was spent to repair it.	Decreased	Decreased
(g) Cheques totalling \$52,000 were deposited into the business bank account on 30 December 2018 but were not cleared by the bank until 3 January 2019.	Not affected	Not affected

**Section B** (36 marks)

Answer **ALL** questions in this section.

- 5 You are given the following figures for Gary Chung's business for the year ended 28 February 2019:

Capital, 1 March 2018	\$4,000,000
Capital introduced during the year:	
Bank	\$200,000
Motor vehicles	\$500,000
Drawings made during the year:	
Goods (at cost)	\$120,000
Cash	\$30,000
Return on capital employed	10%

Additional information for the year:

- (i) The inventory turnover ratio for the year was 20 times.
- (ii) The opening inventory was valued at \$60,000.
- (iii) Rent and rates amounted to 20% of sales. Other operating expenses (excluding depreciation) amounted to 10% of total expenses.
- (iv) The gross profit ratio was 40%.
- (v) The net profit ratio was 10%.

**Required:**

- (a) Prepare a statement of financial position extract as at 28 February 2019, showing the equity section.
- (b) Prepare an income statement for the year ended 28 February 2019.

(a)

**Gary Chung**  
**Statement of Financial Position as at 28 February 2019 (extract)**

	\$
Capital, 1 March 2018	4,000,000
<i>Add</i> Net profit for the year (Workings)	450,000
Capital introduced (\$200,000 + \$500,000)	700,000
	5,150,000
<i>Less</i> Drawings (\$120,000 + \$30,000)	150,000
Capital, 28 February 2019	5,000,000

Closing capital = \$4,000,000 + \$500,000 + \$200,000 – \$120,000 – \$30,000 + Net profit = 4,550,000 + Net profit

Return on capital employed = 10%

Net profit / (\$4,000,000 + 4,550,000 + Net profit) ÷ 2 = 10%

Net profit for the year = \$450,000

(b)

**Gary Chung**  
**Income Statement for the year ended 28 February 2019**

	\$	\$
Sales (W1)		4,500,000
<i>Less Cost of goods sold:</i>		
Opening inventory	60,000	
<i>Add Purchases (balancing figure)</i>	2,850,000	
	2,910,000	
<i>Less Closing inventory (W3)</i>	210,000	2,700,000
Gross profit (W2)		1,800,000
<i>Less Expenses:</i>		
Rent and rates (W4)	900,000	
Other operating expenses (W5)	135,000	
Depreciation (balancing figure)	315,000	1,350,000
Net profit (from part a)		450,000

W1:  $\$450,000 \div \text{Net sales} \times 100\% = 10\%$

Net sales = \$4,500,000

W2:  $\text{Gross profit} \div \$4,500,000 \times 100\% = 40\%$

Gross profit = \$1,800,000

W3:  $(\text{Sales} - \text{Gross profit}) \div \text{Average inventory} = \text{Inventory turnover}$

$(\$4,500,000 - \$1,800,000) \div [(\$60,000 + \text{Closing inventory}) \div 2] = 20$

Closing inventory = \$210,000

W4:  $\text{Rent and rates} = 20\% \text{ of sales} = \$4,500,000 \times 20\% = \$900,000$

W5:  $\text{Other operating expenses} = 10\% \text{ of total expenses}$

$= 10\% \text{ of the difference between gross profit and net profit}$

$= (\$1,800,000 - \$450,000) \times 10\% = \$135,000$



- 6 Humble Co Ltd produced 152,000 units of a single product during the year ended 31 October 2018. There was no opening inventory, while 5% of the units manufactured during the year remained unsold at the year-end.

Price and cost information relating to the product is as follows:

Selling price	\$350 per unit
Direct materials	\$13,376,000
Direct labour (\$25 per hour)	3.5 hours per unit produced
Variable manufacturing overheads	\$12 per unit produced
Fixed manufacturing overheads	\$12,000 per day (365 days for the year)
Variable marketing costs	\$25 per unit sold
Fixed marketing costs	\$2,000,000 per quarter

**Required:**

- (a) Prepare income statements for the year ended 31 October 2018 using the following approaches:
- (i) Absorption costing (5 marks)
  - (ii) Marginal costing (5 marks)
- (b) State two advantages of using marginal costing as compared with absorption costing.  
(Total: 12 marks)

- 6 (a) (i) Under absorption costing:

**Humble Co Ltd**  
**Income Statement for the year ended 31 October 2018**

	\$	\$
Sales [ $152,000 \times (1 - 5\%) \times \$350$ ]		50,540,000
<i>Less Cost of goods sold:</i>		
Direct materials	13,376,000	
Direct labour ( $152,000 \times 3.5 \times \$25$ )	13,300,000	
Variable manufacturing overheads ( $152,000 \times \$12$ )	1,824,000	
Fixed manufacturing overheads ( $\$12,000 \times 365$ )	4,380,000	
	32,880,000	
<i>Less Closing inventory</i> ( $\$32,880,000 \times 5\%$ )	1,644,000	31,236,000
Gross profit		19,304,000
<i>Less Marketing costs: Variable</i> [ $152,000 \times (1 - 5\%) \times \$25$ ]	3,610,000	
Fixed ( $\$2,000,000 \times 4$ )	8,000,000	11,610,000
Net profit		7,694,000

(ii) Under marginal costing:

**Humble Co Ltd**  
**Income Statement for the year ended 31 October 2018**

	\$	\$
Sales $[152,000 \times (1 - 5\%) \times \$350]$		50,540,000
<i>Less Variable cost of goods sold:</i>		
Direct materials	13,376,000	
Direct labour $(152,000 \times 3.5 \times \$25)$	13,300,000	
Variable manufacturing overheads $(152,000 \times \$12)$	1,824,000	
	28,500,000	
<i>Less Closing inventory <math>(\\$28,500,000 \times 5\%)</math></i>	1,425,000	27,075,000
Product contribution margin		23,465,000
<i>Less Variable marketing costs <math>[152,000 \times (1 - 5\%) \times \\$25]</math></i>		3,610,000
Total contribution margin		19,855,000
<i>Less Fixed manufacturing overheads <math>(\\$12,000 \times 365)</math></i>	4,380,000	
Fixed marketing costs $(\$2,000,000 \times 4)$	8,000,000	12,380,000
Net profit		<u>7,475,000</u>

- (b) — Fixed manufacturing costs are sunk costs and therefore not relevant to decision making, but those costs are treated as product costs in absorption costing.
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- 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.
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7 The following information concerns the bank column of the cash book of Joey Lam's business for October 2018. The credit balance shown in the bank statement failed to agree with the credit balance of \$30,588 shown in the cash book as at 31 October 2018. The difference was due to the following:

- (i) A cheque for \$12,300 that was deposited into the bank and recorded in the cash book was not yet credited by the bank.
- (ii) The following cheques issued by Joey were not presented to the bank:

	<i>Amount</i>
To Eddie Lau, a trade creditor	\$288
To Linda Cheung, a non-trade creditor	\$6,560
To Eric Lam, Joey's uncle who had lent money to her business	\$50,000

- (iii) A cheque payment of \$555 to Gabriel Co, a trade creditor, was entered in the cash book as \$5,555.
- (iv) The bank statement showed that a commission of \$9,130 was paid directly into the business bank account, but no record was made in the books.
- (v) A standing order to pay electricity fees of \$10,200 was not entered in the cash book.
- (vi) A cheque for \$21,600, after deducting a cash discount of 10%, was received from Amy Li, a trade debtor, during the month. Joey recorded the gross amount in the cash book.
- (vii) The debit side of the cash book was overcast by \$255.
- (viii) A cheque for \$3,100 drawn by Joey to pay for office furniture was recorded as \$1,300 in the cash book.
- (ix) No entry was made in the cash book for bank charges of \$2,120 shown in the bank statement.
- (x) A cheque for \$2,600 drawn on 18 February 2018 to settle the account of AC & Co, a supplier, was not presented to the bank.
- (xi) The bank returned a cheque for \$15,150 drawn by Lily Kwan, a trade debtor. This cheque was marked 'Please refer to drawer'. Joey did not record the dishonoured cheque in the books.
- (xii) The bank charged interest of \$789 against the business bank account and this amount appeared in the bank statement. This charge was not entered in the cash book.
- (xiii) Cyrus Chan, a trade debtor, paid \$6,000 by credit transfer. This transaction was not recorded in the cash book.

**Required:**

- (a) Update the cash book for Joey Lam's business and show the adjusted balance as at 31 October 2018.
- (b) Prepare a bank reconciliation statement as at 31 October 2018.
- (c) State three possible reasons as to why the cheque from Lily Kwan was dishonoured by the bank.

(a)

**Cash Book (Bank Column)**

	\$		\$
Gabriel Co: Payment overstated (iii) (W1)	5,000	Balance b/d	30,588
Commission income — Direct credit (iv)	9,130	Electricity fees — Standing order (v)	10,200
AC & Co — Stale cheque (x)	2,600	Amy Li — Receipt overstated (vi) (W2)	2,400
Cyrus Chan — Credit transfer (xiii)	6,000	Debit side overstated (vii)	255
Balance c/d	40,572	Office furniture: Payment understated (viii) (W3)	1,800
		Bank charges (ix)	2,120
		Lily Kwan — Dishonoured cheque (xi)	15,150
		Bank interest (xii)	789
	<u>63,302</u>		<u>63,302</u>

W1:  $\$5,555 - \$555 = 5,000$

W2:  $[(\$21,600 \div 90\%) - \$21,600] = 2,400$

W3:  $\$3,100 - \$1,300 = 1,800$

(b)

**Joey Lam**  
**Bank Reconciliation Statement as at 31 October 2018**

	\$
Adjusted overdraft balance as per cash book	(40,572)
Add Unpresented cheques (\$288 + \$6,560 + \$50,000) (ii)	56,848
	16,276
Less Uncredited cheque (i)	12,300
Balance as per bank statement	3,976

- (c) — The drawer does not have enough money in the current account for payment.
- There is no signature, or the signature does not match that on record at the bank.
- The amount in words differs from the amount in figures.
- The cheque is not dated.
- The cheque is a stale cheque.
- The cheque is a post-dated cheque.
- The drawer's account has been closed.
- Alterations to the cheque have not been countersigned by the drawer.

- 8 The following trial balance was prepared from the books of Joseph Ltd as at 30 November 2018 and it failed to agree.

	<i>Dr</i>	<i>Cr</i>
	\$	\$
Office equipment	5,900,000	
Office equipment: Accumulated depreciation		1,230,000
Motor vehicles	500,000	
Motor vehicles: Accumulated depreciation		200,000
Purchases and sales	3,580,293	7,654,388
Rent	240,000	120,000
Trade payables and trade receivables	92,000	31,780
Wages and salaries	680,000	
Inventory, 1 December 2017	125,000	
Bank	63,000	
Auditor's fees		60,000
Discounts allowed and discounts received	12,511	31,227
Ordinary share capital		1,434,909
Retained profits		384,500
General reserve		120,000
Commission revenue		40,000
Allowance for doubtful debts		6,000
	11,192,804	11,312,804

Additional information:

- (i) Income tax expense was estimated to be \$118,022.
- (ii) Depreciation on office equipment was to be charged using the reducing-balance method. The depreciation rate was 10% per annum. Depreciation on motor vehicles was to be charged using the straight-line method. The depreciation rate was 20% per annum.
- (iii) The board of directors resolved to make a transfer of \$300,000 to the general reserve.
- (iv) The allowance for doubtful debts was to be maintained at 7% of trade receivables.
- (v) Wages of \$23,588 were owed as at the year-end date.
- (vi) Closing inventory had a cost of \$101,375 but could only be sold for \$99,000.

**Required:**

- (a) Given that all the balances listed in the trial balance are correct (before accounting for the additional information above). State why the trial balance did not agree. (1 mark)
- (b) Prepare an income statement for the year ended 30 November 2018. (10.5 marks)
- (c) Prepare a statement of financial position as at 30 November 2018. (8.5 marks)

- (a) — Auditor's fee should have been placed on the debit side of the trial balance. If this was done, the trial balance would agree.

(b)

Joseph Ltd

Income Statement for the year ended 30 November 2018

	\$	\$
Sales		7,654,388
<i>Less Cost of goods sold:</i>		
Opening inventory	125,000	
<i>Add Purchases</i>	3,580,293	
	3,705,293	
<i>Less Closing inventory</i>	99,000	3,606,293
Gross profit		4,048,095
<i>Add Other revenues:</i>		
Discounts received	31,227	
Rent revenue	120,000	
Commission revenue	40,000	191,227
		4,239,322
<i>Less Expenses:</i>		
Discounts allowed	12,511	
Wages and salaries (\$680,000 + \$23,588)	703,588	
Rent	240,000	
Auditor's fees	60,000	
Depreciation: Office equipment $[(\$5,900,000 - \$1,230,000) \times 10\%]$	467,000	
Depreciation: Motor vehicles $(\$500,000 \times 20\%)$	100,000	
Increase in allowance for doubtful debts $[(\$92,000 \times 7\%) - \$6,000]$	440	1,583,539
Net profit		2,655,783
<i>Less</i>		
Income tax expense		118,022
Profit after tax		2,537,761
<i>Add</i>		
Retained profits brought forward		384,500
		2,922,261
<i>Less</i>		
<i>Appropriations:</i>		
Transfer to general reserve		300,000
Retained profits carried forward		2,622,261



9 You are given the following account balances of Peter Ltd as at 31 December:

	2017	2018
	\$	\$
Trade receivables	250,000	180,000
Trade payables	80,000	68,000
Bank/(Bank overdraft)	31,500	(8,000)
Cash	690	1,300
5% loan, repayable on 30 June 2019	50,000	50,000
10% loan, repayable on 31 October 2020	100,000	100,000
Inventory	82,000	99,000
Ordinary share capital	200,000	200,000
Property, plant and equipment (net)	500,000	600,000
Retained earnings	434,190	454,300

Additional information:

- (i) Peter Ltd did not have any cash sales transactions in 2017 and 2018.
- (ii) At at 31 December 2016, trade receivables and inventory were \$101,100 and \$50,500, respectively.
- (iii) Sales in 2017 and 2018 amounted to \$2,500,000 and \$3,500,000, respectively, while gross profit amounted to \$900,000 and \$1,250,000, respectively.
- (iv) The amount of ordinary share capital has been \$200,000 since 1 January 2000, when the company was incorporated. No dividends were paid in 2017 and 2018. Retained earnings were \$400,000 as at 31 December 2016.

**Required:**

(a) Calculate the following ratios for 2017 and 2018:

- (i) Current ratio (3 marks)
- (ii) Acid test ratio (3 marks)
- (iii) Days' sales in trade receivables (3 marks)
- (iv) Gross profit ratio (3 marks)
- (v) Net profit ratio (3 marks)
- (vi) Inventory turnover (3 marks)

(Calculations to two decimal places)

(b) Comment on the profitability of the business. (2 marks)

(Total: 20 marks)

**END OF PAPER 2A**