

**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**

2 hours 15 minutes

This paper must be answered in English

**INSTRUCTIONS:**

1. There are three sections in this paper: Section A (24 marks), Section B (36 marks) and Section C (20 marks).
2. All questions in Section A and B are compulsory. You are required to answer one of the two questions in Section C.
3. Show **all** your workings.

**SECTION A**

Answer ALL questions in this section.

**Question 1**

CVP Company is a small manufacturing company producing and selling a single product. Some information in relation to October and November 2017 is extracted as follows:

|  | <b><u>October 2017</u></b> | <b><u>November 2017</u></b> |
|--|----------------------------|-----------------------------|
| Sales volume (which is equal to the production volume) | 950 units                  | 1,000 units                 |
| Selling price per unit                                 | \$100                      | \$105                       |
| Total costs  | \$75,000                   | \$78,000                    |

The variable cost per unit and the fixed cost remained unchanged throughout the two months.

**You are required to:**

- (a) Calculate the net profit for the two months ended 30 November 2017. (1 mark)
- (b) Calculate the contribution margin ratio in percentage for October 2017. (2 marks)
- (c) Calculate the margin of safety in percentage for November 2017. (3 marks)

**<Total: 6 marks>**

## Question 2

Alice Entertainment Company maintains an allowance for doubtful accounts account, which is adjusted at the end of each financial year on a percentage basis, but each year the percentage rate is reviewed in accordance with the prevailing economic conditions. On 1 January 2015, the account had a balance of \$23,500.

The following additional information is available:

| Year ended   | 31 December 2015 | 31 December 2016 |
|--|------------------|------------------|
|  | \$               | \$               |
| Year-end balance of trade receivable<br>(before writing off bad debts) | 525,000          | 472,400          |
| Trade receivable proved to be uncollectible                            | 16,500           | 59,750           |
| Percentage allowance for doubtful accounts                             | 4%               | 8%               |

Due to economic downturn, the company's policy for the year ended 31 December 2017 is to relate the allowance for doubtful accounts to age of debts outstanding. The debts outstanding at 31 December 2017 and the required allowance for doubtful accounts are as follows:

| Debts outstanding                     | Amount  | Allowance for<br>doubtful accounts |
|---------------------------------------|---------|------------------------------------|
|                                       | \$      |                                    |
| Up to 1 month                         | 200,000 | 5%                                 |
| More than 1 month and up to 2 months  | 120,000 | 7%                                 |
| More than 2 months and up to 3 months | 50,000  | 9%                                 |
| More than 3 months                    | 40,000  | 10%                                |

**You are required to:**

Based on the above information, prepare the allowance for doubtful accounts account for the 3 years ended 31 December 2015, 2016 and 2017. (4 marks)

**<Total: 4 marks>**

## Question 3

Ann Martin is a manufacturing company producing a single household product. To maintain its competitive edge along with a rising number of competitors, the company invested a large sum of money to start a project to build up its plant and machinery on 1 June 2017.

The project which involved a new machine with a list price of \$660,000 was purchased with a trade discount of 20% on the list price. Related costs incurred included insurance and freight charges amounting to \$8,500 being shipment from Germany to Hong Kong. Installation and modification works were carried out by technical team of the company. Costs incurred during 2017 were:

|   | \$     |
|---|--------|
| Design fee of modification work           | 12,000 |
| Maintenance fee paid to 30 September 2018 | 24,000 |
| Testing fee                               | 9,500  |
| Licence fee paid to 31 March 2018         | 6,000  |
| Labour and overheads of installation      | 10,600 |

The machine started to operate on 1 October 2017 and was expected to have a useful life of 5 years. It could be disposed of at \$8,600 at the end of its useful life.

**You are required to:**

- (a) Calculate the depreciation charge of the machine for the year 2017. (4 marks)

The following is a list of estimated costs at two levels of activity during the last quarter of 2017:

|                  | Activity Level |              |
|------------------|----------------|--------------|
|                  | 50,000 units   | 70,000 units |
| Costs            | \$             | \$           |
| Direct materials | 650,000        | 910,000      |
| Direct wages     | 350,000        | 490,000      |
| Depreciation     | ?              | ?            |
| Town gas         | 75,000         | 85,000       |

**You are required to:**

- (b) Classify each of the listed costs into fixed, variable, or semi-variable cost. (2 marks)
- (c) Calculate the total costs if the expected activity level is 80,000 units a quarter. (2 marks)

**<Total: 8 marks>**

## Question 4

Cherry Town Ltd prepared a list of account balances for the year ended 31 December 2017:

|  | \$        |
|--|-----------|
| Plant and equipment – cost                     | 2,500,000 |
| Plant and equipment – accumulated depreciation | 1,500,000 |
| Draft profit for the year                      | 25,000    |
| Bank   | 15,000    |
| Ordinary share capital (\$0.5 share value)     | 1,200,000 |
| Retained profit as at 1 January 2017           | 65,000    |
| General reserve                                | 30,000    |

Having dissatisfied with the draft profit for the year, the board of directors would like to launch a massive expansion plan to boost sales in coming years for better profits and you were approached for advice.

**Required:**

- (a) Fearing that it might lose control of the company, the board of directors was considering whether to arrange bank loans or issue preference shares to raise further capital. Explain the accounting treatments of bank loans and preference shares in the statement of financial position of the company. (2 marks)
- (b) Some directors, however, suggested issuing 500,000 new ordinary shares at a price twice the share value of existing shares. Complete the table below to show the effect of the share issue on the following accounts. (2 marks)

|                        | Increase | Decrease | No effect | Amount \$ |
|------------------------|----------|----------|-----------|-----------|
| General reserve        |          |          |           |           |
| Ordinary share capital |          |          |           |           |
| Retained profits       |          |          |           |           |
| Bank                   |          |          |           |           |

- (c) Another group of directors were worrying that the value of the non-current assets of the company was not large enough to secure bank loans with favourable terms. The following two measures were proposed:
- It was suggested that the stock of loose tools and stationery should be treated as a non-current asset in the financial statements.
  - It was suggested that the depreciation charged in the past two years should be adjusted to create a higher value of non-current assets.

Identify the relevant accounting concept that the company **must** follow in each of the above measures and provide brief explanations. (2 marks)

**<Total: 6 marks>**

## SECTION B

Answer ALL questions in this section.

## Question 5

AMC Company is a manufacturing company producing a single product commenced business on 1 November 2017. The budgeted information for November 2017 is shown below:

|  |         |
|--|---------|
|  | \$      |
| Selling price per unit                                     | 470     |
| Materials cost per unit                                    | 120     |
| Labour cost per unit                                       | 70      |
| Variable production overheads per machine hour             | 10      |
| Variable selling and administrative expenses per unit sold | 15      |
| Fixed production overheads                                 | 400,000 |
| Fixed selling and administrative expenses                  | 132,000 |

Currently the company is using absorption costing and the fixed production overheads are absorbed by the products on the basis of machine hours. Production of a unit of the product requires 2 machine hours.

Whilst the maximum capacity in a month is 5,600 machine hours, the budgeted level of activity in November 2017 is 5,000 machine hours.

All the actual costs in November 2017 are same as the budgeted costs. During the month, 2,400 units were produced and 2,300 units were sold.

**You are required to:**

- (a) Calculate the product cost per unit showing the prime cost and absorbing the fixed production overheads by predetermined overhead absorption rate. (2 marks)
- (b) Prepare the income statement for November 2017 under absorption costing showing the closing inventory and accounting for the over-/under-absorbed fixed production overheads by adjusting the cost of goods sold. (4 marks)
- (c) Calculate the period cost for November 2017 if marginal costing is used. (1 mark)
- (d) State whether the reported net profit for November 2017 under absorption costing is equal to, higher than or lower than that under marginal costing. Explain why. (Calculation is not required.) (2 marks)

The company management is dissatisfied with the performance of the company in November 2017. The Marketing Manager has proposed the following promotion package for December 2017:

- (i) reduce the selling price by 5%, and
- (ii) hire three promoters remunerated at a monthly basic salary of \$9,000 each and a commission of \$16 for each unit sold.

It is anticipated that the promotion package can increase the sales volume by 30%. However, the increase in production is subject to availability of machine hours which is a limiting factor.

All data in relation to costs, expenses and maximum capacity in November are also applicable to December. In addition, the sales volume will remain at 2,300 units if the proposed promotion package is not implemented. However, the units produced in December will take into account the sales volume and the opening inventory. The company intends not to keep any closing inventory at 31 December 2017.

**You are required to:**

- (e) Determine whether the promotion package for December 2017 proposed by the Marketing Manager should be accepted. (3 marks)

**<Total: 12 marks>**

## Question 6

Amy is a sole trader in sportswear trading industry. The financial information of the company for the years 2016 and 2017 was as follows:

| Income Statements for the years ended 31 December |                |                |
|---|----------------|----------------|
|   | 2016           | 2017           |
|   | \$             | \$             |
| Sales   | 386,500        | 488,830        |
| Less: Returns inwards                             | -              | 21,850         |
|   | <u>386,500</u> | <u>466,980</u> |
| Less: Cost of sales                               |                |                |
| Opening inventory                                 | 17,600         | 25,500         |
| Add: Purchases                                    | 228,650        | 253,830        |
| Less: Closing inventory                           | 25,500         | 36,700         |
|   | <u>220,750</u> | <u>242,630</u> |
| Gross profit                                      | 165,750        | 224,350        |
| Less: Expenses                                    | 108,450        | 165,050        |
| Net profit  | <u>57,300</u>  | <u>59,300</u>  |

| Statements of Financial Position as at 31 December |                |                |
|--|----------------|----------------|
|  | 2016           | 2017           |
|  | \$             | \$             |
| <b>Non-current assets</b>                          | 156,800        | 337,600        |
| <b>Current assets</b>                              |                |                |
| Inventory  | 25,500         | 36,700         |
| Trade receivable                                   | 77,300         | 55,000         |
| Bank   | 120,000        | 89,300         |
|  | <u>379,600</u> | <u>518,600</u> |
| Capital  | 129,700        | 180,000        |
| Add: Net profit for the year                       | 57,300         | 59,300         |
|  | <u>187,000</u> | <u>239,300</u> |
| Less: Drawings                                     | 7,000          | 4,700          |
|  | <u>180,000</u> | <u>234,600</u> |
| <b>Non-current liabilities</b>                     |                |                |
| 8% Bank loan                                       | 80,000         | 160,000        |
| <b>Current liabilities</b>                         |                |                |
| Trade payable                                      | 36,600         | 76,000         |
| Other payable                                      | 83,000         | 48,000         |
|  | <u>379,600</u> | <u>518,600</u> |

Additional information:

- (i) All sales and purchases are on credit.
- (ii) On 31 December 2015, the trade payable was \$19,760.
- (iii) A purchases invoice amounted to \$5,900 was found in Amy's drawer on 5 January 2018 while the goods were received on 29 December 2017.
- (iv) In 2017, goods invoiced at \$30,000 were delivered to a customer on a sale-or-return basis. This batch of goods had been marked up at 50% on cost and treated as credit sales for the year. As at 31 December 2017, only one-fourth of these goods was accepted by the customer.

**You are required to:**

- (a) Calculate (to two decimal places) the following ratios for 2016 and 2017 (assume 365 days per year):
  - (i) Net profit ratio
  - (ii) Current ratio
  - (iii) Average trade payables repayment period (months)
  - (iv) Inventory turnover (times) (7 marks)
- (b) Based on the ratios calculated in (a) above,
  - (i) briefly comment on the liquidity of Amy's business for the year 2017. (3 marks)
  - (ii) state two limitations of ratio analysis. (2 marks)

**<Total: 12 marks>**

## Question 7

Au, Lau and Wong have entered into a partnership sharing profits and losses in the ratio of 2:1:1. The agreement states that interest on capital is allowed at 5% per annum. The following statement of financial position was prepared on 31 December 2017 before an appropriation of unexpected loss of the year.

| Au, Lau and Wong<br>Statement of Financial Position as at 31 December 2017 |              |                |                  |
|--|--------------|----------------|------------------|
|  | \$           | \$             | \$               |
| <b><i>Non-current assets</i></b>   |              |                |                  |
| Furniture and fixtures   |              | 650,000        |                  |
| Less: Accumulated depreciation   |              | <u>180,000</u> | 470,000          |
| Motor vehicles   |              | 92,000         |                  |
| Less: Accumulated depreciation   |              | <u>85,000</u>  | <u>7,000</u>     |
|  |              |                | 477,000          |
| <b><i>Current assets</i></b>   |              |                |                  |
| Inventory  |              | 15,000         |                  |
| Trade receivables  | 15,000       |                |                  |
| Less: Allowance for doubtful accounts                                      | <u>1,500</u> | 13,500         |                  |
| Bank   |              | <u>5,500</u>   |                  |
|  |              | <u>34,000</u>  |                  |
| Less: <b><i>Current liabilities</i></b>                                    |              |                |                  |
| Trade payables   |              | <u>15,000</u>  |                  |
| Net current assets   |              |                | <u>19,000</u>    |
|  |              |                | <u>496,000</u>   |
| <b><i>Financed by:</i></b>   |              |                |                  |
| Capital accounts:  |              |                |                  |
| Au   |              | 300,000        |                  |
| Lau  |              | 150,000        |                  |
| Wong   |              | <u>100,000</u> | 550,000          |
| Current accounts:  |              |                |                  |
| Au   |              | 15,500         |                  |
| Lau  |              | 33,000         |                  |
| Wong   |              | <u>(2,500)</u> | 46,000           |
| Loss for the year  |              |                | <u>(100,000)</u> |
|  |              |                | <u>496,000</u>   |

On 1 January 2018, the operation manager Ho, was admitted into the partnership. He introduced \$50,000 cash and a motor vehicle valued at \$100,000 to pay for capital and share of goodwill at \$60,000. To improve operating performance, it was agreed that Au would participate more in daily operation and hence, Au could maintain his profit sharing ratio in the new partnership unchanged. The new partners agreed on the following terms:

- (i) The following assets were revalued before the admission of Ho:
  - Furniture and fixtures was revalued at \$400,000.
  - Included in the inventory was a batch of remaining items purchased to meet a rush order at \$2,800. It could be sold at \$1,500 if a modification fee of \$300 was spent on it.
- (ii) Goodwill was valued at \$360,000 and was not maintained in the books.
- (iii) The recoverable amount of trade receivable was estimated to be \$13,100.
- (iv) Immediately after the changes, based on the capital balance of Ho, the balances of all partners' capital accounts should be adjusted to coincide with the new profit and sharing ratio by transferring the excess to or deficiency from the current accounts.

**You are required to:**

- (a) Prepare the revaluation account. (3 marks)
- (b) Prepare the partners' capital accounts (in columnar form), showing the admission of Ho. (4 marks)
- (c) Prepare the statement of financial position as at 1 January 2018. (5 marks)

**<Total: 12 marks>**

## SECTION C

Answer ONE question in this section.

## Question 8

Mr. Smith is a sole trader engaged in clothing business. After a fire broke out in December 2017, Mr. Smith lost some of his inventory as well as most of his accounting records. The following information was available:

- (i) Some of the balances as at 31 December were as follows:

|                                 | 2016    | 2017    |
|---------------------------------|---------|---------|
|                                 | \$      | \$      |
| Premises (net)                  | 500,000 | ?       |
| Equipment (net)                 | 250,000 | ?       |
| Inventory                       | 80,000  | 27,000  |
| Trade receivable                | 157,500 | 179,100 |
| Trade payable                   | 107,750 | 110,000 |
| Bank                            | 87,500  | ?       |
| Cash                            | 6,000   | 7,982   |
| Prepaid operating expenses      | 4,750   | --      |
| Accrued operating expenses      | --      | 7,000   |
| Accrued administrative expenses | 5,970   | --      |
| Prepaid administrative expenses | --      | 6,250   |
| Capital                         | ?       | ?       |

- (ii) Transactions processed through his business bank account:

|                         | \$      |
|-------------------------|---------|
| Receipts:               |         |
| Cash                    | 120,000 |
| Receipts from customers | 900,000 |
| Disposal of equipment   | 50,000  |
| Payments:               |         |
| Drawings                | 10,000  |
| Operating expenses      | 350,000 |
| Administrative expenses | 180,000 |
| Payments to suppliers   | 890,000 |

- (iii) The cash deposits represented cash sales during the year after the following payments were made:

|                         |        |
|-------------------------|--------|
|                         | \$     |
| Drawings per month      | 1,000  |
| Administrative expenses | 22,500 |

- (iv) Goods returned by customers during the year amounted to \$25,000 and discounts made to customers amounted to \$8,900. Bad debts during the year amounted to \$8,000.
- (v) Goods returned to suppliers during the year amounted to \$16,500 and discounts from suppliers amounted to \$12,600.
- (vi) The normal mark-up on goods sold by Mr. Smith was 40%.
- (vii) A piece of equipment with a net book value of \$34,500 was sold at \$50,000 on 1 January 2017.
- (viii) Depreciation on a reducing-balance basis is charged on non-current assets at the following rates:
- |           |               |
|-----------|---------------|
| Premises  | 10% per annum |
| Equipment | 25% per annum |

**You are required to prepare for Mr. Smith:**

- (a) Bank account and cash account for the year ended 31 December 2017. (5 marks)
- (b) Income statement for the year ended 31 December 2017. (9 marks)
- (c) Statement of financial position as at 31 December 2017. (6 marks)

**<Total: 20 marks>**

## Question 9

Venus Company is a fast-food restaurant. The draft financial statements as at 31 December 2017 showed that the amounts of the draft net profit, current assets and current liabilities were \$108,000, \$267,000 and \$152,000 respectively. When its bookkeeper received a bank statement, she found that the balance at the year-end in the statement did not match with the bank balance of \$89,000 in the cash book. She then further reviewed the accounting records and discovered the following matters:

- (i) A credit note for \$9,500 issued to Thomas, a customer, had been posted to the wrong side of his account.
- (ii) There was a payment for electricity amounting to \$7,150. The cheque had been recorded twice in the cash book but the related nominal account was correctly recorded.
- (iii) The payment side of the bank account had been overcast by \$1,380 while the sales return day book had been overcast by \$21,800.
- (iv) On 20 December 2017, the company received a purchase order of \$77,000 from a customer. The customer paid a deposit of \$27,000 to secure the delivery of goods on 20 January 2018. The bookkeeper recorded the whole amount as sales while treated the outstanding amount as a trade receivable.
- (v) On 1 July 2017, the company paid \$90,000 for an advertising program which would end on 30 June 2020. The bookkeeper allocated the payment over a 3 years' period and recognised \$15,000 for advertising expense and \$75,000 for prepaid expense in the year.
- (vi) A credit sales of \$100,000 were made to a customer Mr. Fung. A trade discount of 10% was granted and the transaction was recorded as follows:

|                  | Dr (\$) | Cr (\$) |
|------------------|---------|---------|
| Bank             | 90,000  |         |
| Discount allowed | 10,000  |         |
| Sales            |         | 100,000 |

- (vii) No entry for a monthly payment of \$3,520 for building management fees by standing order was recorded in the company cash book. The company had treated the item as an accrued expense at the year end.
- (viii) A credit transfer of \$3,820 from its customer Ronald Limited shown in the bank statement was not recorded in the cash book.
- (ix) Two cheques issued by the company were not presented to the bank. One of the cheques amounted to \$6,800 was issued on 15 May 2017, and another one amounted to \$5,730 was issued on 8 August 2017.

**You are required to:**

- (a) Write up a bank reconciliation statement as at 31 December 2017, commencing with the balance per the cash book before adjustments. (4 marks)
- (b) Prepare the necessary journal entries to correct the above items. Narrations are not required. (12 marks)
- (c) Prepare a statement to adjust working capital for items (i) to (v) as at 31 December 2017. (4 marks)

**<Total: 20 marks>**

**~ End of Paper ~**