# BUSINESS, ACCOUNTING AND FINANCIAL STUDIES <br> PAPER 2A <br> ACCOUNTING MODULE 

## (Sample Paper)

Time allowed: 2 hours 30 minutes
This paper must be answered in English.

## INSTRUCTIONS

(1) There are three sections in this paper: Section A (30 marks), Section B (50 marks) and Section C (20 marks).
(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

Answer ALL questions in this section.

1. A company has incurred the following expenditures on a new machine purchased for business use:

|  | $\$$ |
| :--- | ---: |
| List price (allowance of 20\% trade discount) | 800000 |
| Legal fees related to the purchase | 5200 |
| Machine installation and adaptation | 7300 |
| Maintenance fee | 9900 |
| Testing | 6500 |
| Initial training for operators | 3000 |

The manager expects the efficiency of the machine to decline sharply over its useful life. He wants to adopt a depreciation method that will best meet the nature of the machine.

## REQUIRED:

(a) Calculate the cost of the machine to be capitalised.
(b) (i) Identify a depreciation method that is in line with the manager's view.
(ii) Explain one advantage of the depreciation method you identified in (i).
2. An inexperienced accounts clerk of Silver Moon Company has drafted the following sales ledger control account for December 20X6:

|  | $\$$ |  | $\$$ |
| :--- | ---: | :--- | ---: |
| Balance brought forward | 46980 | Cash and cheques received | 310650 |
| Credit sales | 408530 | Discounts allowed | 23027 |
| Cash sales | 60800 | Allowance for doubtful debts | 6000 |
| Set off with purchases ledger |  | Allowance to customer for slightly |  |
| $\quad$ control | 18410 | damaged goods | 19100 |
| Returns inwards | $\underline{28070}$ | Balance carried forward | $\underline{204013}$ |
|  |  |  | 562790 |
|  |  |  |  |

After investigation, the following errors were discovered:
(i) Bad debts of \$30 130, written off in July 20X6, had been omitted in the control account.
(ii) A customer, who had fully settled his account in November 20X6, returned unsatisfactory goods amounting to $\$ 8000$ in December 20X6. The amount was correctly recorded in the returns inwards account but not in the sales ledger.
(iii) Discounts allowed had been correctly entered in the customers’ accounts in the sales ledger but had been overcast by $\$ 900$ in the discount column of the cash book.

## REQUIRED:

(a) Rewrite the sales ledger control account.
(b) Describe how credit balances in the sales ledger should be shown in the statement of financial position.
3. Lan Yan Manufacturing Company has extracted the following information as at 31 December 20X6:
\$
$\begin{array}{llr}\text { Inventories as at 1 January 20X6: } & \text { Raw materials } & 40800 \\ & \text { Work in progress } & 35000 \\ & \text { Finished goods } & 180000 \\ & 89000 \\ \text { Royalties (based on the number of units produced) } & 90200 \\ \text { Depreciation charge for the year: } & \text { Plant and machinery } & 897560 \\ & \text { Delivery vehicles } & 65377 \\ & \text { Office equipment } & 60800\end{array}$
$\begin{array}{lr}\text { Direct labour } & 60800 \\ \text { Purchase of raw materials } & 170000\end{array}$
$\begin{array}{lr}\text { Factory manager’s salary } & 170000 \\ & 57000\end{array}$
Rent and electricity 112500
Administrative and selling expenses 87300
Materials loss due to fire 50000

Additional information:
(i) At 31 December 20X6, inventories were valued as follows:

|  | $\$$ |
| :--- | ---: |
| Raw materials | 77000 |
| Work in progress | 52000 |
| Finished goods | 175000 |

(ii) It is the company's policy to apportion two-thirds of the costs common to both the factory and the office to the cost of production.
(iii) Finished goods are transferred to the sales department at cost plus $10 \%$.

## REQUIRED:

Ascertain each of the following for the year ended 31 December 20X6:
(a) Cost of raw materials consumed
(b) Prime cost
(c) Production cost of finished goods
(d) Transfer price of finished goods
4. Mr Chan is running a small business selling different types of books. Worrying about the heavy recurrent costs of maintaining a computerised accounting system and the loss of data upon system failure, he insists on using a manual system to handle all the inventory records and accounting entries.

## REQUIRED:

(a) Suggest two advantages of computerised accounting system to convince Mr Chan to install one.
(4 marks)
(b) Identify four types of accounting errors that cannot be prevented by a computerised accounting system.
(4 marks)
(Total: 8 marks)

## SECTION B

Answer ALL questions in this section.
5. Leung had run a trading company as a sole trader for many years. The company made huge sales revenue amounting to $\$ 1260000$ for the 3 months ended 31 March 20X6. He found that more than $80 \%$ of the revenue was contributed by the sales team headed by Chan, the sales manager. As the sales team was a valuable asset to the company, Leung suggested recording this at $\$ 420000$, which equals 1 month's sales revenue, in the company's statement of financial position as at 31 March 20X6.

## REQUIRED:

(a) Comment on Leung's suggestion with reference to an appropriate accounting principle or concept.

On 1 April 20X6, Leung invited Chan to form a partnership. Their partnership agreement contains the following clauses:
(i) An interest of $10 \%$ per annum is paid on capital.
(ii) Leung and Chan share profits and losses in the ratio of 2:1.
(iii) Chan is entitled to a partner's salary of \$300 000 per annum.

Goodwill was agreed at $\$ 60000$ on 1 April 20X6 and it was decided that no goodwill account would be kept in the books. The fixed capital of the partnership was $\$ 360000$, to be divided between Leung and Chan in their profit and loss sharing ratio. Chan would not inject any cash as capital. The excess or deficiency in fixed capital would be transferred to or from the respective partner’s current account.

The partnership continued to use the books of accounts of Leung's business. The following is the trial balance at 31 December 20X6 before making any adjustment for goodwill on Chan's admission as a partner:

|  | $\$ ’ 000$ | $\$ \prime 000$ |
| :--- | ---: | ---: |
| Sales |  | 4200 |
| Cost of goods sold | 2460 |  |
| Operating expenses | 660 |  |
| Chan's salary payments during the year | 318 |  |
| Drawings: Leung | 160 |  |
|  | 14 |  |
| Capital: Leung |  | 280 |
| Current assets | 750 |  |
| Non-current assets | 811 |  |
| Current liabilities | $\underline{5173}$ | 5173 |

All sales were made on a fixed mark up and operating expenses were accrued evenly over the year.

## REQUIRED:

(b) Prepare the trading and profit and loss account of Leung's sole trader business for the three months ended 31 March 20X6.
(3 marks)
(c) Prepare the partnership's trading, profit and loss and appropriation account for the nine months ended 31 December 20X6.
(d) Draw up Leung and Chan's capital accounts for the year 20X6.
6. The draft statement of financial position of Healthy Food Company as at 31 December 20X6 is as follows:

| ASSETS | \$ | \$ |
| :---: | :---: | :---: |
| Office machinery | 148000 |  |
| Less: Accumulated depreciation | 45300 | 102700 |
| Motor vehicles | 10000 |  |
| Less: Accumulated depreciation | 2500 | 7500 |
| Inventories |  | 127600 |
| Account receivables, net |  | 85500 |
| Suspense account |  | 6800 |
|  |  | 330100 |
| CAPITAL AND LIABILITIES |  | \$ |
| Capital |  | 114622 |
| Account payables |  | 68750 |
| Rates paid in advance |  | 2750 |
| Bank loan (repayable on 31 December 20Y2) |  | 100000 |
| Draft net profit for the year |  | 22068 |
| Bank overdraft |  | 21910 |
|  |  | 330100 |

Subsequent to the preparation of the draft statement of financial position, the following were discovered:
(i) On comparing the bank statement with the cash book for the month of December 20X6, the following differences were found:
(1) Dividend income of $\$ 8060$ had been credited directly into the bank account but the amount was recorded in the cash book as bank interest charged on the overdraft balance.
(2) A cheque of $\$ 10000$ issued for paying the deposit of acquiring a motor van in February 20 X 7 was not yet presented to the bank for payment. The amount was recorded as the only motor vehicle of the company. Motor vehicles are depreciated at $25 \%$ per annum on cost.
(ii) Owing to an oversight, $\$ 1300$ prepaid insurance at 31 December 20X5 had been omitted from the general ledger in 20X6. Moreover, rates of \$2750 paid in advance at 31 December 20X6 had neen listed as a credit balance in the trial balance.
(iii) At 31 December 20X6, a customer with an outstanding debt of $\$ 10800$ was declared bankrupt and the amount was to be written off. In addition, the allowance for doubtful debts was to be reduced by $\$ 540$.
(iv) Included in the closing inventories were goods at $\$ 10000$ received from Royce Limited on a sale or return basis. No other entries had been made in the books in respect of these goods.

## REQUIRED:

(a) Prepare the necessary journal entries to correct the above. Narrations are not required. (8 marks)
(b) Prepare the statement of financial position as at 31 December 20X6 in proper format. (7 marks)
(Total: 15 marks)
7. Top Four Co Ltd is a manufacturing firm specialising in producing tailor-made souvenirs. The sales manager has received an urgent order of 1000 metal photo frames at the price of $\$ 15$ each to be supplied in one week's time. The following information relates to the order:
(i) Materials:
(1) Metal bar is the material for the frame and hard plastic board for the backing. A batch of 20 photo frames requires 8 metres of metal bar and 4 pieces of standard plastic board.
(2) The metal bars are in constant use and there is sufficient stock in hand for the order. The cost information is as follows:

|  | \$ per metre |
| :--- | :---: |
| Historical cost | 5 |
| Current buying-in cost | 7 |
| Scrap value | 2 |

(3) The cost of the plastic board currently in stock is $\$ 50$ per piece. It is made of a traditional material which has been banned in some western countries. The replacement price of the plastic board is currently $\$ 70$ per piece while the scrap value of that in stock is $\$ 5$ per piece. The production manager does not foresee any alternative use for the plastic board if it is not used for the order.
(ii) Direct labour
(1) Labour hours are required at 15 minutes per photo frame.
(2) The hourly rate is $\$ 20$.
(3) Being the low season, there is a total idle time of 100 hours for direct labour. However, if the job is accepted, overtime work will be required and a bonus of $50 \%$ on the normal rate has to be paid.
(iii) Overheads
(1) The overhead costs for the year ended 31 December 20X7 are budgeted as follows:

|  | $\$ ’ 000$ |
| :--- | ---: |
| Depreciation (factory building) | 1000 |
| Supervision | 900 |
| Depreciation (machinery) | 450 |
| Insurance (machinery) | 150 |
| Heating and lighting | 200 |

(2) Overheads are allocated to the three departments on the following basis:

|  | Metal work | Assembly | Store |
| :--- | :---: | :---: | :---: |
| Floor area (square metres) | 2000 | 1200 | 800 |
| Number of employees | 47 | 24 | 4 |
| Book value of machinery | 13000 | 2000 | - |
| Number of material requisitions | 3500 | 500 | - |
| Total direct labour hours | 200000 | 90000 | - |

(3) If the order is accepted, no additional overheads will be incurred.

## (iv) Pricing

The business normally adds a $10 \%$ profit on job cost to arrive at its invoice price.

## REQUIRED:

(a) Prepare an overheads distribution statement and determine the overheads absorption rate both for the metal work and assembly departments. (Correct all amounts to the nearest dollar.) (4 marks)
(b) Based on the absorption costing method and the company's pricing policy, calculate the selling price that should be charged for the above order.
(6 marks)
(c) Should the order be accepted if the relevant cost approach is used? Support your suggestion with appropriate figures to convince the management.
(d) Suggest two other factors that the management should consider before making the decision.

## SECTION C

Answer ONE question in this section.
8. Good Prospect Limited commences its business on 1 January 20X6 and has made a net profit of $\$ 3000000$ for the year ended 31 December 20X6. However, the company experienced problems in getting $\$ 1800000$ to finance the acquisition of a plant in Tai Po for expansion. Lee, the managing director, could not understand why the amounts in each of the following pairs of items were not equal:
(i) net profit for the year and net increase in cash and bank balances for the year
(ii) bank balance in the cash book and the bank statement balance as at 31 December 20X6

## REQUIRED:

(a) Explain to the managing director why the amounts in each of the above pairs of items would differ.

As at 31 December 20X6, the long-term financing of Good Prospect Limited was as follows:

| Capital and reserves | $\$ ’ 000$ |
| :--- | ---: |
| 200000 Ordinary shares of $\$ 10$ each | 2000 |
| $15000012 \%$ Preference shares of $\$ 10$ each | 1500 |
| Share premium | 1000 |
| Retained profits | $\boxed{600}$ |

After studying the information above, Mok, the executive director, proposed the following alternatives to finance the acquisition of the plant:

Alternative 1: To issue 100000 ordinary shares at $\$ 18$ per share. The annual ordinary dividend will remain at $20 \%$ on the net profit available for distribution to ordinary shareholders.

Alternative 2: To issue $\$ 1800000$ 8\% debentures (repayable in June 20Y2) at par, payable in full on application. Debenture interest is payable twice a year on 1 January and 1 July

Alternative 3: To purchase the plant on credit. The terms of agreement provide for five annual payments of $\$ 480000$, commencing at the end of the first year. Assume that interest accrues evenly over the credit period.

It was estimated that following this expansion, the profit before interest for the first financial year would amount to \$3 600000.

## REQUIRED:

(b) Calculate the gearing ratio under each alternative immediately after the acquisition.
(3 marks)
(c) Calculate the earnings per share under each alternative for the first financial year after the expansion. (Note: Ignore taxation.)
(3 marks)
(d) Based on your answer in (b) and (c), evaluate the above three financing alternatives from the perspective of shareholders.
(e) List two non-financial factors that should be taken into account before making the decision.
(2 marks)
(Total: 20 marks)
9. Mary is a fresh university graduate who has majored in marketing. She is enthusiastic about conducting a business of her own alongside her full-time employment. She borrowed a sum of $\$ 90000$ from a bank at an interest rate of $5 \%$ per annum on 1 January $20 X 7$ to run a shop which sells free-sized T-shirts of her own design.

Information relating to the shop is as follows:
(i) The shop's rental is $\$ 5000$ per month. The annual rates and insurance expenses are $\$ 3600$ and $\$ 4500$ respectively.
(ii) A shop attendant is hired at a basic salary of $\$ 7000$ per month plus a commission of $5 \%$ of the sales value.
(iii) All T-shirts are imported from factories based on the Mainland and are sold at $100 \%$ mark-up on cost.
(iv) The budgeted sales volume is 500 shirts per month. Mary has made arrangements with the Mainland suppliers for the supply of 500 shirts each month. Then a logo sticker will be fixed on each shirt by a sewing service provider nearby at the cost of $\$ 2$ each. The purchase costs for the first quarter of 20 X 7 are as follows:
\$

| January 20X7 | 22500 |
| :--- | :--- |
| February 20X7 | 24000 |
| March 20X7 | 25000 |

(v) In order to publicise her new brand, Mary will print some promotional leaflets to be distributed once a week in the neighborhood. The printing cost of the leaflets amounts to $\$ 500$ per month and a part-time worker is hired at $\$ 1000$ per month for the distribution work.
(vi) A point-of-sale system costing $\$ 30000$ was purchased to help keep inventory record and cash transactions. In addition, Mary furnished the shop with necessary furniture and fixtures by spending a further $\$ 60000$. Depreciation is to be calculated at $12 \%$ per annum on a reducing balance basis for the point-of-sale system and $10 \%$ on cost for the furniture and fixtures.
(vii) The actual sales figures for the first quarter ended 31 March 20X7 are as follows:

|  | Number of shirts |
| :--- | :---: |
| January 20X7 | 350 |
| February 20X7 | 420 |
| March 20X7 | 400 |

## REQUIRED:

(a) Define direct costs and indirect costs and identify one example for each from the case above.
(3 marks)
(b) Compare marginal costing with absorption costing with respect to inventory valuation and income determination.
(4 marks)
(c) Prepare an income statement for the first quarter ended 31 March 20X7 using the marginal costing method, assuming the FIFO method is adopted in the valuation of unsold goods.
(6 marks)
(d) With the figures you have compiled in (c) above, calculate the breakeven point (in sales dollars) of the first quarter ended 31 March 20X7.
(3 marks)

Noting that there are several giant enterprises in the low-margin garment market, Mary's father has always persuaded Mary to discontinue her small business which is unlikely to be competitive enough to survive.

## REQUIRED:

(e) Discuss two possible reasons why Mary is still enthusiastic about running a business of her own.

