HONG KONG INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS

AND

HONG KONG ASSOCIATION FOR BUSINESS EDUCATION

HONG KONG DIPLOMA OF SECONDARY EDUCATION EXAMINATION 2020/21

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 (24 marks) and Section C (20 marks).

2. All questions in Section A are compulsory. You are required to answer two of the three questions in Section B and answer one of the two questions in Section C.

3. Show **all** your workings.

SECTION A (24 marks)
Answer **ALL** questions in this section.

Question 1

A surgical mask factory only produces and sells Level I 3-layer surgical mask in the market. It has a production capacity of 800,000 boxes per annum. The cost information related to the product (a box of 50 masks) is as follows:

	$
Direct materials	
- Blue non-woven fabric	4.0
- Filtering material	7.0
- White non-woven fabric	3.5
- Ear loop	3.0
- Plastic nose wire	4.5
Variable manufacturing overheads	1.0
Variable selling and distribution expenses	2.0

Direct labour costs $60 per hour. Since it is a machine-oriented production, only five minutes of direct labour are to be used to produce a box of masks which is sold at $50 in the market. Budgeted fixed manufacturing overheads for the year amount to $2,200,000.

You are required to:

(a) Calculate the contribution margin of each box of masks. (2 marks)

(b) Calculate the break-even sales in boxes. (1 mark)

There is a surge of demand for masks during the year, the cost has been increased because of the shortage of supply of direct materials. Cost of ear loop and plastic nose wire is increased by 10% and the cost of remaining direct materials has been doubled.

Besides, the factory has received a special order from Healthy Ltd for 90,000 boxes of nano-tech masks at a price of $130 each. To fulfil this order, the factory will have to purchase a specialised machine for nano-tech costing $3,750,000. This machine has no resale value and cannot be used in the production of the normal product. Variable selling and distribution expenses will be reduced by 75% due to a simplified distribution process.

The factory currently operates at 80% of its capacity. Current production and sales activities will not be affected. Total fixed manufacturing overheads will remain unchanged whether or not the special order is accepted.

You are required to:

(c) State whether or not the factory should accept the special order from Healthy Ltd. Explain with all calculations. (3 marks)

<Total: 6 marks>

Question 2

IDEA is a large furniture and home accessories retailer with over 10 retail stores in Hong Kong. Its rapid growth has slowed in recent years due to difficult global economic environment. The following financial information is extracted from the books of the company:

	Years ended 31 December		
	2019	2018	2017
Number of ordinary shares issued	841,000	928,000	1,031,000
	$	$	$
Net sales (80% on credit)	44,555,000	48,343,125	49,388,750
Net profit before tax	1,795,000	3,310,000	4,251,000
Profit tax expense	639,000	1,205,000	1,618,000
Preference dividend	26,000	-	-
Trade receivables	486,000	629,500	900,000
Inventory	5,932,500	5,865,500	6,634,000
Non-current assets	13,901,000	14,825,000	8,000,000
Total assets	20,582,000	22,162,000	21,000,000
Current liabilities	557,650	635,300	397,800
Current price per ordinary share	26	35	39

Additional information:

Price Correct, the major competitor of IDEA, has the following ratios for the year ended 31 December 2019:

Net profit margin	2.00%
Average trade receivables collection period	5.71 days
Acid test ratio	0.80 : 1

You are required to:

(a) Calculate (to two decimal places) the following ratios of IDEA for the years ended 31 December 2018 and 2019.

(i) Average trade receivables collection period (in days) (1 mark)

(ii) Acid test ratio (1 mark)

(b) In comparison with Price Correct, comment on IDEA's liquidity performance for the year ended 31 December 2019. (2 marks)

(c) Calculate (to two decimal places) the earnings per share and price-earnings ratio of IDEA for the year ended 31 December 2019. (2 marks)

<Total: 6 marks>

Question 3

Mary started running a gym centre in Causeway Bay on 1 September 2020, launching personal fitness courses to customers, with financial year ended on 31 December.

(i) For joining the personal fitness courses, customers have to sign a contract of 100-lesson package valued at $50,000. Each package has an expiry period of one year, counting down from the contract effective date. Customers can easily book a lesson via company app, and one lesson is deducted automatically in the system no matter presence or absence. Cancellation is only allowed 3 hours prior to the booked session in the app. According to the system, 50 customers had signed the contract, and 1,500 lessons had been booked including 10 lessons that customers did not show up at the centre. Mary recorded a sum of $2,500,000 as sales revenue of the year.

(ii) Other than the fitness courses, Mary also launched a new power drink with an expensive online advertising campaign. Since this new power drink is likely to be a major source of revenue in the future, she decided to spread the advertising cost over the periods during which the product generates revenue.

You are required to:

State the accounting principle or concept that has been violated and explain the accounting treatment of the above independent situations. (6 marks)

<Total: 6 marks>

Question 4

Treasure Island Company runs a garment trading business and its financial year ends on 31 December each year. The following table shows year-end trade receivable balances, bad debts written off and percentages of allowances for doubtful accounts for the years 2018 and 2019.

Year ended 31 December	Trade receivables at the end of the year (before writing off bad debts)	Bad debts written off	Percentage of allowance for doubtful accounts
	$	$	
2018	130,000	4,800	5%
2019	155,000	2,000	Note (ii)

Notes:

(i) The balance of allowance for doubtful accounts as at 31 December 2017 was $1,600.

(ii) At the year-end of 2019, the company decided to record a specific provision of $600 for a transaction. In addition, the percentage of allowance for doubtful accounts was maintained at 5%.

You are required to:

(a) Prepare the allowance for doubtful accounts account for the years ended 31 December 2018 and 2019. (5 marks)

(b) Prepare an extract of income statement showing the amount of bad debts expense for the years ended 31 December 2018 and 2019.

(1 mark)

<Total: 6 marks>

SECTION B (24 marks)
Answer **2** questions in this section.

Question 5

Anna and Billy were in partnership, sharing profit and loss equally. On 31 December 2018, the trial balance of the partnership was as follows:

	$	$
Property, net	100,000	
Goodwill	20,000	
Trade receivable	10,000	
Prepaid insurance	3,150	
Inventory	15,000	
Trades payable		28,000
Cash at Bank	10,000	
Capital – Anna		70,000
Capital – Billy		60,000
Current – Anna	370	
Current – Billy		520
	158,520	158,520

On 1 January 2019, Anna retired and Billy invited his friend Carson to join the partnership in the following terms:

(i) Carson's initial capital was agreed at $50,000. He would bring in $50,000 cash as capital.

(ii) Goodwill was estimated at $30,000. No goodwill account was to be remained in the books of the new partnership. Carson's share of goodwill was settled by a personal loan from Billy to Carson through a transfer between the capital accounts.

(iii) The prepaid insurance was not applicable to the new partnership due to a change of ownership.

(iv) Property was to be revalued to 120% of the net book value.

(v) Billy and Carson were to share profits and losses in the ratio of 2:1 respectively.

(vi) Carson was to receive a salary of $2,000 per month.

(vii) The balance of Anna's capital account was to be settled immediately after her retirement.

You are required to:

(a) Prepare the capital accounts of Anna, Billy and Carson in columnar form to record Anna's retirement and Carson's admission. (6 marks)

During the year ended 31 December 2019, the partnership made a net loss of $24,000 before the appropriations. Depreciation had been provided on the net book value of the non-current assets at 20% per annum. At 31 December 2019, the partnership had not paid salaries to Carson for 7 months. The following balances were extracted from the books as at 31 December 2019:

	$
Bank overdraft	63,055
Inventory	17,000
Trade receivable	30,000
Trade payable	20,000

On 31 December 2019, the partners decided to dissolve the partnership on the following terms:

(i) The property was to be sold at $108,000.

(ii) Carson was to take over the inventory as a settlement of the salaries owed to him by the partnership.

(iii) Billy was responsible to collect the trade receivable of the partnership, receiving a commission of 4% based on the received amount. After deducting the commission, the remaining amount was to be deposited into the bank account. Debts of $2,000 were proved to be uncollectible.

(iv) A cash discount of 3% was received from the suppliers.

You are required to:

(b) Prepare a realisation account. (3.5 marks)

(c) Prepare the current accounts of Billy and Carson in columnar form for the year ended 31 December 2019. (2.5 marks)

<Total: 12 marks>

Question 6

William Company manufactures and sells a single product – Essential Mask. The following income statement was prepared for the year ended 31 December 2018:

	$	$
Sales (10,000 units)		120,000
Less: Cost of goods sold		
Opening inventory (1,400 units)	7,000	
Production cost (14,200 units)	71,000	
	78,000	
Less: Closing inventory (5,600 units)	28,000	50,000
Gross profit		70,000
Less: Sales commission	16,000	
Administrative expenses	25,000	41,000
Net Profit		29,000

Additional information:

(i) The production cost consists of prime cost and fixed production overheads.

(ii) In 2019, the numbers of unit produced and sold were 15,000 units and 20,000 units respectively. Selling price and prime cost per unit increased by 50% and 20% respectively.

(iii) The actual fixed production overheads in 2019 were $21,300 which was the same as that of 2018.

(iv) There was no under- and over-absorption of fixed production overheads in 2018.

(v) The predetermined fixed overheads absorption rate of 2019 was the same as that of 2018.

(vi) Sales commission is variable and administrative expenses are fixed. In 2019, Essential Mask was sold in a batch of 50 units. The calculation of sales commission was based on the number of batches sold. The sales commission for each batch was $80.

(vii) There was no change in administrative expenses.

(viii) The company adopts weighted average method for inventory valuation. The value of closing inventory was calculated to the nearest dollar.

You are required to:

(a) Prepare the income statement for the year ended 31 December 2019 under absorption costing, showing the detailed cost of goods sold and accounting for the over-/under-absorbed fixed production overheads. (6 marks)

(b) Prepare a statement to calculate the net profit under marginal costing for the year ended 31 December 2019, commencing with the net profit from part (a). (2 marks)

On 1 January 2020, a supplier offers to supply goods which have the same quality as Essential Mask to William Company. William Company needs to pay for carriage cost at $1 per unit. The company also predicts the following:

(i) The annual demand of the product is 12,000 units in 2020.

(ii) Indirect labour will increase by $10,000 for conducting the quality check of the products.

(iii) Factory rent can be reduced by $5,000 if the production of Essential Mask is discontinued.

(iv) The prime cost and non-production cost remain unchanged.

(v) William Company is planning to produce other types of products. It will not keep any closing inventory at the end of 2020.

(vi) John, the Production Manager, opposes the offer with the reasons of:

"We bought the special machinery at a cost of $6,000 two years ago. The machinery does not have other uses. If the company does not produce the masks, the machinery can only be sold for $1,580 despite its written down value of $4,000."

You are required to:

(c) Determine with supporting calculations the maximum price per unit of the product quoted by the supplier which the William Company would accept. (3 marks)

(d) Define 'irrelevant costs' and give one example from the information provided above. (1 mark)

<Total: 12 marks>

Question 7

Helen commences operating HK Kitchen since 2016 and has employed Alan as the company's junior account clerk. Alan has received the following bank statement for the month of November 2020:

Date 2020		Description	Withdrawal $	Deposit $	Balance $
Nov	1	Balance b/f			15,524
	2	Fund transfer		5,000	20,524
	3	Cheque 500103	110		20,414
	9	Cash deposits		800	21,214
	11	Cheque 500122	4,316		16,898
	18	Cheque 500124	92		16,806
	18	Interest earned		40	16,846
	19	Cash withdrawals	416		16,430
	24	Cheque deposits		294	16,724
	25	Refer to drawer (Note iv)	36		16,688
	27	Direct credit (Note vi)		266	16,954
	30	Cheque 000213 (Note vii)	104		16,850
	30	Bank service charges	12		16,838

Alan discovers that the ending bank balance as shown on the bank statement does not agree with the ending cash at bank balance in the books of the company:

	$	
Balance as at 1 November 2020	15,414	*Dr*
Balance as at 30 November 2020	18,526	*Dr*

Notes:

(i) Interest earned and bank service charge, shown in the bank statement, have not been recorded in the books.

(ii) Cheques deposited in November amounting to $3,600 are not credited on the bank statement until after 30 November. The following cheques have been issued and recorded in the books but have not yet been presented to the bank.

Cheque Number	Payee	Issue date	$
500043	John	5 May 2020	866
500123	Tommy	13 November 2020	1,288

It is the practice of the bank not to honour cheques outstanding for more than six months.

(iii) During November 2020, a receipt of $520 from a customer has been correctly recorded in the sales ledger but the amount has been recorded as $500 in the cash book.

(iv) The cheque received from a customer is returned by the bank on 25 November which was not recorded in the cash book.

(v) The bank reconciliation statement as at 31 October 2020 is extracted as follows:

	$
Balance as per cash at bank account	14,548
Cheque 500043	866
Cheque 500103	110
Balance as per bank statement	15,524

(vi) The direct credit entry shown in the bank statement should have been made to another customer of the bank.

(vii) Alan has been notified that the cheque 000123 is made in error and adjustment would be made by the bank in December 2020.

(viii) On 19 November, Helen has withdrawn cash from bank for her personal use. No entry has been made.

You are required to:

(a) Update the cash at bank account of HK Kitchen. (4 marks)

(b) Prepare a bank reconciliation statement as at 30 November 2020, commencing with the updated balance of the cash at bank account. (5 marks)

(c) Indicate how the cash at bank balance will be reported in HK Kitchen's statement of financial position and determine the value to be reported. (1 mark)

On 1 December 2020, Helen further introduced cash of $40,000 into the business. On the same day, $40,000 was transferred from the company's current account into the time deposit account. When the time deposit matured on 1 January 2021, HK Kitchen's bank account has been credited with an amount of $40,300, comprising of the principal and interest. However, Alan has recorded the receipt on 31 December 2020.

You are required to:

(d) Prepare the necessary journal entry to correct the above transaction for the month ended 31 December 2020. Narrations are not required. (2 marks)

<Total: 12 marks>

SECTION C (20 marks)

Answer **ONE** question in this section.

Question 8

Summer Limited is a toy manufacturing company. After the preparation of a draft profit and loss account, the trial balance of the company as at 31 December 2019 is as follows:

	Dr	Cr
	$	$
400,000 Ordinary share capital		2,000,000
9% Debentures		500,000
Retained profits		1,900,000
Profit and loss		950,000
General reserve		2,400,000
Trade payable		216,000
Property, plant and equipment	5,566,800	
Accumulated depreciation – Property, plant and equipment		927,800
Inventory (derived by physical count)	560,300	
Trade receivable	908,700	
Cash at bank (note v)	1,850,000	
Suspense (note v)	8,000	
	8,893,800	8,893,800

The directors queried the accuracy of the financial performance and conducted a thorough investigation of the accounting records. The following errors were later discovered:

(i) Ten-year 9% debentures of $500,000 were issued on 1 April 2019. The transaction was properly recorded in the accounting books. The debenture interests would be paid yearly on 1 April starting on 1 April 2020. No interest expenses had been accrued in the year.

(ii) On 1 July 2019, a new anti-theft system of $20,000 was installed into an equipment. The account clerk wrongly recorded the anti-theft system as an administrative expense. The equipment was acquired at the cost of $300,000 on 1 July 2017. The useful life of the equipment was 10 years and the relevant depreciation was recorded using straight line method.

On 31 December 2019, the company traded in the equipment for a new model which cost $315,000. The trade-in value of the old equipment was $280,000. The balance was settled by cheque on the same day. The account clerk did not record these transactions in the books.

(iii) In 2019, a batch of goods costing $60,000 was sent to a customer on a sale or return basis. Summer Limited was informed by the customer on 31 December 2019 that 60% of the goods would be kept by them and the unsold goods would be returned to the company in January 2020. According to the contract, the gross profit margin for this batch of goods was 25%. No records had been made in the books.

(iv) On 31 December 2019, some goods costing $58,400 were found obsolete and could only be sold for $50,000 after having them repaired for $4,000. No adjustments had been made in the closing inventory for the above.

(v) The account clerk could not locate the cash book to extract the cash at bank balance as at 31 December 2019. Therefore, he listed the cash at bank balance in the trial balance based on the balance per online bank statement on the same date. The suspense account then existed accordingly. In January 2020, it was found that a deposit was sent to the bank on 31 December 2019 but not yet been credited by the bank.

(vi) On 1 November 2019, the company issued 500,000 ordinary shares at $2 per share. The account clerk recorded the cash proceed in cash at bank account and credited the general reserve account.

(vii) The company declared and paid ordinary share dividend of $0.2 per share on 1 July 2019. The account clerk recorded the payment as an administrative expense. In addition, in view of the profit in 2019, the board of directors resolved to declare ordinary share dividend of $0.1 per share on 20 January 2020.

You are required to:

(a) Prepare the necessary journal entries to correct the above. Narrations are not required. (11 marks)

(b) Prepare a statement to calculate the shareholders' funds as at 31 December 2019. (5 marks)

Summer Limited adopts an absorption costing system in valuing inventory. The relevant cost items for the production of toys are as follows:

(i) Cost of plastic used for kitchen toys

(ii) Wages of workers in an assembly department

(iii) Rent for office equipment

(iv) Royalty for cartoon logos printed on toy cars

(v) Insurance for fax machine

(vi) Wages for warehouse keepers

You are required to:

(c) Define "product cost" and "period cost". (2 marks)

(d) Based on the above items, identify the product cost of toys. (2 marks)

<Total: 20 marks>

Question 9

Wesley is the sole proprietor of a toy wholesales business. The only records he kept consisted of entries made in a notebook. On 31 December 2019, someone broke into the shop and some of the accounting records, inventory and all cash were stolen. After investigation, Wesley was able to identify the following:

(i) The following were the asset and liability balances extracted from Wesley's notebook:

	1 January 2019	31 December 2019
	$	$
Furniture, at net book value	130,000	?
Inventory	14,000	2,510
Trade receivables	16,800	7,200
Trade payables	41,000	37,800
Prepaid operating expense	4,050	3,150
Bank	31,800	?
Cash	3,960	-

(ii) The following receipts and payments were extracted from bank statement:

	$
<u>Receipts</u>	
Cash deposits	170,000
Receipts from trade debtors	?
<u>Payments</u>	
Payments to trade creditors	210,000
Operating expenses	47,520
Carriage outwards	7,330
Carriage inwards	8,000

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

	$
Drawings	6,000
Operating expenses	9,780

(iv) All the purchases were made on credit. During the year, discounts allowed and discounts received amount to $4,250 and $1,200 respectively.

(v) The average trade receivables turnover ratio was 10 times. The amounts received from trade receivables were all banked. Cash sales for 2019 doubled the amount of credit sales.

(vi) Company maintained the uniform gross profit margin rate of 40%.

(vii) The depreciation of furniture should be calculated at 20% of the net book value.

(viii) Insurance company agreed to claims for 50% of the cash loss and 60% of the inventory loss from burglary.

You are required to:

(a) Draw up a cash account to show the amount of cash misappropriated. (2 marks)

(b) Prepare an income statement for the year ended 31 December 2019. (8 marks)

(c) Prepare the statement of financial position as at 31 December 2019. (6 marks)

In the production process, the following three types of factory overheads are incurred, each of which demonstrating a different cost behaviour. The maximum production capacity was 80,000 units. Information relating to factory overheads at different levels of production was shown as follows:

Level of production (units)	20,000	40,000	60,000	80,000
	$	$	$	$
Factory overheads – type 1	210,000	210,000	(i)	210,000
Factory overheads – type 2	240,000	(ii)	720,000	960,000
Factory overheads – type 3	260,000	350,000	(iii)	650,000

You are required to:

(d) Identify the cost behaviour for the three types of factory overheads and find the missing figures (i) to (iii). (4 marks)

<Total: 20 marks>

~ End of Paper ~

