



ST. MARGARET'S SECONDARY SCHOOL

Preliminary Examinations 2022

CANDIDATE NAME

CLASS

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REGISTER NUMBER

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PRINCIPLES OF ACCOUNTS

7087/02

Paper 2

29 August 2022

Secondary 4 Express / 5 Normal (Academic)

2 hours

Additional Materials: Writing papers

READ THESE INSTRUCTIONS FIRST

Write your name, class and index number on all the work you hand in.

Write in dark blue or black pen on both sides of the paper.

Do not use staples, paper clips, highlighters, glue or correction fluid.

You may use an approved calculator.

Answer **all** questions.

The businesses described in this question paper are fictitious.

Where the columnar format is used, the running balance column should be updated for the first and last entries. Where applicable, the balance should be brought down to the next financial year.

All calculations must be shown adjacent to the answer.

At the end of the examination, fasten all your work securely together.

The number of marks is given in brackets [] at the end of each question or part question.

The total of the marks for this paper is 60.

For Examiner's
Use

60

This document consists of **5** printed pages and a blank page.
Answer **all** questions.

- 1 Infocom Pte Ltd is a company providing poster design services. The following balances were extracted from the books on 31 May 2022.

| | \$ |
|---|--------------|
| Share capital, 70 000 ordinary shares | 210 000 |
| Retained Earnings, 1 June 2021 | 45 930 |
| Bank Loan | 80 000 |
| Fixtures and fittings | 130 000 |
| Motor vehicles | 84 000 |
| Accumulated depreciation: | |
| Fixture and fittings | 52 000 |
| Motor vehicles | 15 960 |
| Cash at bank | 215 702 (Dr) |
| Discount allowed | 2 250 |
| Trade receivables | 170 000 |
| Trade payables | 44 590 |
| Insurance expense | 2 550 |
| Salaries expense | 40 000 |
| Design fee revenue | 188 450 |
| Utilities expense | 13 840 |
| Motor vehicles repair | 3 788 |
| Rent income | 17 000 |
| Allowance for impairment of trade receivables | 8 200 |

Additional information:

- (i) Commission income of \$1 700 was earned but not yet collected.
- (ii) Insurance expense had been paid for 15 months up to 31 August 2022.
- (iii) Motor vehicle repairs of \$800 had been incorrectly debited to the utilities expense account.
- (iv) The bank loan was obtained on 1 June 2021 and will be repaid equally over 10 years. Interest on loan is charged at 5% per annum.
- (v) Fixtures and fittings are depreciated at 20% per annum on cost.
- (vi) Motor vehicles are depreciated at 10% per annum using the reducing balance method.
- (vii) The business reviewed its trade receivables and decided that 3% of the outstanding balance may be uncollectible.
- (viii) The company declared a dividend of \$0.13 per share. The dividend will be paid on 3 November 2022.

REQUIRED:

- (a) Prepare the statement of financial performance for the year ended 31 May 2022. [9]

- (b) Prepare the statement of financial position as at 31 May 2022.

[11]

[Total 20m]

- 2 Nick owns CoolAir Pte Ltd, a business that sells air-conditioners. The following information were extracted from his book as at 31 July 2021.

| \$ | |
|-----------------------|---------|
| Credit sales revenue | 350 000 |
| Cash sales revenue | 167 000 |
| Sales returns | 6 500 |
| Cost of sales | 189 200 |
| Operating expenses | 202 825 |
| Equity, 1 August 2020 | 450 000 |
| Equity, 31 July 2021 | 550 000 |

REQUIRED

- (a) Calculate the following profitability ratios for the year ended 31 July 2021. Show your answers to **two** decimal places.

| | | |
|-------|---------------------|-----|
| (i) | Mark-up on cost | [2] |
| (ii) | Gross profit margin | [2] |
| (iii) | Profit margin | [2] |
| (iv) | Return on equity | [1] |

Mr Tan, a businessman, wishes to invest in either CoolAir Pte Ltd or Mandarin Pte Ltd, a direct competitor of CoolAir Pte Ltd .

The following profitability ratios were extracted from the books of Mandarin Pte Ltd.

| | |
|---------------------|--------|
| Mark-up on cost | 195.52 |
| | % |
| Gross profit margin | 64.33% |
| Profit margin | 19.38% |
| Return on equity | 17.15% |

REQUIRED

- (b) Comment on the profitability of CoolAir Pte Ltd against Mandarin Pte Ltd. Use the given information and your answer to (a). [6]
- (c) Advise which business Mr Tan should consider investing in. Justify your decision with reasons. [2]

- (d) Suggest **one way** in which businesses can improve their profitability. [1]
[Total 16m]

- 3 Isabelle owns Sparkle Shop, which sells lights. The business records inventory using the FIFO method.

On 1 July 2022, the business had 40 units of inventory valued at \$6 800.

During the month of July, the following transactions took place:

| Purchases | | |
|-----------|------------------|-----------------|
| Date | Quantity (Units) | Cost price (\$) |
| Jul 5 | 20 | 2 400 |
| Jul 11 | 60 | 8 300 |
| Jul 18 | 50 | 7 600 |

| Sales | | |
|--------|------------------|--------------------|
| Date | Quantity (Units) | Selling price (\$) |
| Jul 6 | 40 | 18 600 |
| Jul 21 | 80 | 39 800 |

Additional information

- 1 All purchases of inventory were made on credit.
- 2 During the month of July, credit notes issued amounted to \$2 900. The cost of these returns was \$1 000.

REQUIRED

- (a) Calculate the following for the month of July 2022:
- (i) Cost of sales [1]
 - (ii) Net sales revenue [2]
- (b) Prepare the inventory ledger account for the month ended 31 July 2022. [6]

Sparkle Shop sells his products to customers on credit, on a 35 day credit term. The following information relates to the business for the years ended 31 July 2019 to 2021.

| | 2019 | 2020 | 2021 |
|---|-------------|------------|------------|
| Rate of trade receivables turnover | 11.06 times | 9.61 times | 8.69 times |
| Trade receivables collection period (round to the nearest day) | 33 days | 38 days | 42 days |

REQUIRED

- (c) Comment on the trend of rate of trade receivables turnover and trade receivables collection period over the three years from 2019 to 2021. [4]
- (d) Explain how the trend of trade receivables turnover of Sparkle Shop will affect its business' liquidity position. [2]
- (e) Suggest **two** ways to improve Sparkle Shop's efficiency in the management of its trade receivables. [2]

Isabelle decides to enter into the Food and Beverage Industry and set up a café in one of the malls in Orchard. She is considering bringing in cookies to be sold at her café. Due to limited funds, she will only bring in one type of cookies.

The information about the two types of cookies are as follows:

| | Bon Bon | Jim's |
|--------------------------------|---|--|
| Cost price each bag of cookies | \$12.50 (300g) | \$7.50 (300g) |
| Flavors | Tasty artisan stuffed cookies with 4 unique flavours | Delicious chunky and gooey drool-worthy filled cookies with 16 flavours |
| Gross profit margin | 32% | 20% |
| Nature of product | <ul style="list-style-type: none"> • Organic • No artificial coloring and preservatives • Offers vegetarian and vegan friendly cookies | <ul style="list-style-type: none"> • Low sugar • Low calories • Gluten free |
| Packaging | Comes in paper packaging | Comes in beautiful air-tight tins with cartoon characters |

Isabelle also discovered the following customer preference in her research:

- The café is frequently patronized by tourists who like healthy and organic cookies. These tourists have higher spending power.
- As the café is next to a gym, the weight conscious customers prefer sugar free or low sugar food items.

REQUIRED

- (f) Advise Isabelle which type of cookies she should choose to sell. Justify your decision with **three** reasons. [7]

[Total 24m]

End Of Paper

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Marking Scheme
Question 1

Infocom Pte Ltd

Statement of Financial Performance for the year ended 31 May 2022

| | \$ | \$ |
|---|-------------|-------------|
| Design fee revenue | | 188 450 |
| Add other income: | | |
| Rent income | 17 000 | |
| Commission income | 1 700 [1] | 18 700 |
| | | 207 150 |
| Less expenses: | | |
| Discount allowed | 2 250 | |
| Insurance expense (2 550 – 510) | 2 040 [1] | |
| Salaries expense | 40 000 | |
| Utilities expense (13 840 – 800) | 13 040 [1] | |
| Motor vehicles repair (3 788 + 800) | 4 588 [1] | |
| Interest on loan | 4 000 [1] | |
| Depreciation of fixtures and fittings (20% x 130 000) | 26 000 [1] | |
| Depreciation of motor vehicles [10% x (84 000-15960)] | 6 804 [1] | |
| Impairment loss on trade receivables (reversal) | (3 100) [1] | |
| | | 95 622 |
| Profit for the year | | 111 528 [1] |

Infocom Pte Ltd
Statement of Financial Position as at 31 May 2022

| | \$ | \$ | \$ |
|---|-----------|--------------------------|-----------------|
| Assets | | | |
| Non-current assets | Cost | Accumulated depreciation | Net Book Value |
| Fixtures and fittings | 130 000 | 78 000 | 52 000 [1] |
| Motor vehicles | 84 000 | 22 764 | 61 236 [1] |
| | 214 000 | 100 764 | 113 236 |
| | | | |
| Current assets | | | |
| Trade receivables | 170 000 | | |
| Less: Allowance for impairment of trade receivables | 5 100 [1] | 164 900 | |
| Cash at bank | | 215 702 | |
| Commission income receivable | | 1 700 [1] | |
| Prepaid insurance expense | | 510 [1] | |
| Total current assets | | | 382 812 |
| Total assets | | | 496 048 |
| | | | |
| Equity and Liabilities | | | |
| Owner's equity | | | |
| Share capital, 70 000 ordinary shares | | | 210 000 |
| Retained earnings (45 930 + 111 528 – 9 100 [1]) | | | 148 358 |
| Total equity | | | 358 358 |
| | | | |
| Non-current liabilities | | | |
| Long term borrowing (80 000 – 8 000) | | | 72 000 [1] |
| | | | |
| Current liabilities | | | |
| Trade payables | | 44 590 | |
| Dividends payable | | 9 100 [1] | |
| Interest expense payable | | 4 000 [1] OF | |
| Current portion of long term borrowings | | 8 000 [1] | |
| Total current liabilities | | | 65 690 |
| Total equity and liabilities | | | *496 048 |

*1m if both totals = \$496 048

Question 2

| | |
|-----------------------|---------|
| Credit sales revenue | 350 000 |
| Cash sales revenue | 167 000 |
| Sales returns | 6 500 |
| Net sales revenue | 510 500 |
| Cost of sales | 189 200 |
| Gross profit | 321 300 |
| Operating expenses | 202 825 |
| Profit for the year | 118 475 |
| Equity, 1 August 2020 | 450 000 |
| Equity, 31 July 2021 | 550 000 |

(a)(i)

Mark-up on cost

$$= (\text{Gross profit} / \text{Cost of sales}) \times 100$$

$$= (321300[1] / 189200) \times 100$$

$$= 169.82\%[1]$$

(a)(ii)

Gross profit margin

$$= (\text{Gross profit} / \text{Net sales revenue}) \times 100$$

$$= (321300[1] / 510500) \times 100$$

$$= 62.94\% [1]$$

(a)(iii)

Profit margin

$$= (\text{Profit for the year} / \text{Net sales revenue}) \times 100$$

$$= (118475[1] / 510500) \times 100$$

$$= 23.21\% [1]$$

(a)(iv)

Return on equity

$$= (\text{Profit for the year} / \text{Average equity}) \times 100$$

$$= (118475 / (450000 + 550000) / 2) \times 100$$

$$= 23.70\% [1]$$

| | CoolAir Pte Ltd | Mandarin Pte Ltd |
|---------------------|-----------------|------------------|
| Mark-up on cost | 169.82% | 195.52% |
| Gross profit margin | 62.94% | 64.33% |
| Profit margin | 23.21% | 19.38% |
| Return on equity | 23.70% | 17.15% |

(b)

[Any 6 of the following points = 6m]

The mark-up on cost of CoolAir Pte Ltd at 169.82% is **lower and worse** than Mandarin Pte Ltd at 195.52%.**[1]**

This may be due to CoolAir Pte Ltd not been able to set a higher selling price on its products or purchase its goods at a lower cost price as compared to Mandarin Pte Ltd. **[1]**

This is evident at the higher mark-up on cost of 195.52% set by Mandarin Pte Ltd, as compared to CoolAir Pte Ltd's mark-up on cost of 169.82%.**[1]**

This resulted in CoolAir Pte Ltd having a **worse** gross profit margin at 62.94% compared to Mandarin Pte Ltd at 64.33%. **[1]**

Despite this, the profit margin of CoolAir Pte Ltd at 23.21% is **better than** that of Mandarin Pte Ltd at 19.38%.**[1]**

This indicates that CoolAir Pte Ltd is **more efficient** in managing its operating expenses to generate sales revenue as compared to Mandarin Pte Ltd**[1]**.

In conclusion, CoolAir Pte Ltd is **more profitable** than Mandarin Pte Ltd**[1]**.

(c)

[Decision = 1m + 1 good reasoning = 1m]

Mr Tan should invest in CoolAir Pte Ltd. [1]

CoolAir Pte Ltd has a better return on equity of 23.70% as compared to Mandarin Pte Ltd at 17.15%[1]. This means that for every \$1 invested in CoolAir Pte Ltd, Mr Tan would have earned around \$0.24 as compared to earning around \$0.17 for every dollar invested in Mandarin Pte Ltd[1]. Hence Mr Tan should invest in CoolAir Pte Ltd.

(d) [Any 1 of the following=1m]

- Sell goods at higher selling price so as to **increase sales revenue**.
- Buy goods at lower cost price by buying in bulk to obtain trade discount/ switching to another supplier that offers lower prices **without compromising on quality**.
- Increase sources of other income such as sub-letting part of extra office space to help to increase profit
- To reduce operating expenses such **as staff salaries or rent to help to increase profit**.

Question 3

(a) (i) Cost of sales **[at cost price]**
 = \$6800 (40 units) + \$2400 (20 units) + \$8300 (60 units) - \$1000
 (returns)
= \$16 500 [1]

(ii) Net sales revenue **[at selling price]**
 = Sales revenue – sales returns
 = [\$18600 (40 units) + \$39800 (80 units)][1] - \$2900
= \$55 500[1]

(b)

| Inventory account | | | | |
|-------------------|----------------------------------|-----------|------------|-----------|
| 2021 | | Dr (\$) | Cr (\$) | Bal (\$) |
| Jul 1 | Balance b/d (+40units) | | | 6 800 DR |
| Jul 3 | Trade payable (+20units) | 2 400 [1] | | 9 200 DR |
| Jul 6 | Cost of sales (-40units) | | 6 800 [1] | 2 400 DR |
| Jul 11 | Trade payable (+60units) | 8 300 [1] | | 10 700 DR |
| Jul 18 | Trade payable (+50units) | 7 600 [1] | | 18 300 DR |
| Jul 19 | Cost of sales (-20units-60units) | | 10 700 [1] | 7 600 DR |
| Jul 31 | Cost of sales | 1000 [1] | | 8 600 DR |
| Aug 1 | Balance b/d | | | 8 600 DR |

(c) **[Any 4 of the following points = 4m]**

Sparkle Shop' rate of trade receivables turnover **worsened** each year from 11.06 times in 2019 to 9.61 times in 2020 to 8.69 times in 2021 **[1]**.

This can also be seen in Sparkle Shop's trade receivables collection period which **worsened** each year from 33 days in 2019, then to 38 days in 2020, and finally to 42 days to 2021**[1]**. This indicates Sparkle Shop was taking a longer time to collect debts from its credit customers, as much as 9 days longer to collect debts, over the 3 years. **[1]**

More importantly, the trade receivables collection period has **gone beyond the 35 day** credit period in both 2020 and 2021. **[1]**

Hence, Sparkle Shop become **less efficient** at managing its trade receivable over the three years.**[1]**

(d) **[Any 1 of the following points = 2m]**

- 1 By taking a longer than usual period to collect payment from its credit customers, Sparkle Shop would have lesser cash on hand to pay operating expenses and short-term debt obligations[1], thereby causing its liquidity position to worsen[1].
- 2 By becoming less efficient at managing its trade receivables would pose an increased risks of impairment loss from uncollectible debts owed by credit customers[1]. This will in turn worsen the liquidity position of the business.[1]

(e) **[Any 2 of the following = 2m]**

- Improve billing efficiency by sending out invoices as quickly as possible after completion of work and stating payment terms clearly.
- Incentivise early payments by offering customers discounts or rewards for early payment of invoices.
- Engage customers proactively. Do not leave overdue payments for a long period of time. Make calls as soon as payment is overdue.
- Improve credit granting process by granting credits only to customers with healthy credit ratings.
- Analyse past information on cash collections to predict at-risk customers.

Question 4

| | |
|-------------------|---|
| Decision [1] | Advise Isabelle to choose Bon Bon. |
| Evidence 1 [1] | Bon Bon offers organic cookies while Jim's does not. |
| Explanation 1 [1] | As Isabelle's café has a stream of tourists who prefer organic healthy cookies, by selling Bon Bon cookies will meet the needs of this group of customers. As this group of tourists has better spending ability, the higher selling price of Bon Bon cookies will not pose an issue. |
| Evidence 2 [1] | Bon Bon offers cookies that are suitable for vegetarian and vegan. |
| Explanation 2 [1] | This will help Isabelle to attract the vegetarian and vegan group of customers to purchase her cookies. This helps to widen Isabelle's customer base. |
| Evidence 3 [1] | Bon Bon gross profit margin is 12% higher than Jim's. |
| Explanation 3 [1] | Therefore, selling Bon Bon cookies will likely to generate more gross profit for Isabelle, assuming the same number of units can be sold for both cookies. This will lead to higher profit for the year for Isabelle's business. |
| Conclusion | Isabelle should buy from Bon Bon. |

OR

| | |
|-------------------|--|
| Decision [1] | Advise Isabelle to choose Jim's. |
| Evidence 1 [1] | Jim's offer cookies that are low in sugar and calories and are gluten free. |
| Explanation 1 [1] | This will attract the group of customers from the gym who are weight conscious, looking for low sugar and low calories cookies. |
| Evidence 2 [1] | Jim's cookies costs only \$7.50 per 300g, which is \$5 cheaper as compared to Bon Bon's. |
| Explanation 2 [1] | With the lower cost per bag of cookies, this would mean a smaller capital outlay for Isabelle. This would be great for Isabelle, who has a tight budget to work on. |
| Evidence 3 [1] | Jim's cookies are packed in attractive tins that are air-tight. |
| Explanation 3 [1] | This will attract customers who are attracted to the cartoon characters tins, especially for mothers, who may buy these cookies for their children, who will be attracted to these beautiful tins. |
| Conclusion | Isabelle should buy from Jim's. |

