## SECTION A - CASE QUESTIONS (Total: 50 marks)

## Answer 1

A) Strengths

- Well established (more than 40 years) manufacturing company
- Owns a brand name (GOM) itself
- Already has a certain percentage of the market share
- Loyal customers
- Owner-occupied premises
- Superior quality and safer products
- New designer may bring new ideas to the products
- New machines may increase output
B) Weaknesses
- Retirement of the Chief Designer
- New Chief Designer may not bring new ideas acceptable to market and customers
- Old manufacturing building hinders the development of the company
- Cannot replace old plant and machinery with modern equipment due to premises restrictions
- Limited expansion plan hinders economy of scale
- Dropping sales over the years
- Dropping net profit margin over the years
- Dropping number of customers over the years
C) Opportunities
- Increase in premises value can provide an opportunity for selling the premises and moving to another place for future development
- CEPA will open the door for selling into mainland China
- Affluent society leads to expanding market for premium product
D) Threats
- Competition from the mainland and South East Asia for better designed products and cheaper price
- Fancy scented candles can be easily replaced by other products
- Inferior products in the market can badly affect the candle industry
- $\quad$ Short of supply of factory premises may hinder the business development


## Answer 2

To : Mr. C.M. Cheung, Managing Director<br>From: Mr. Tommy Lau, Financial Controller<br>Date : dd/mm/yyyy

Re: Total Cost Plus Pricing and Marginal Cost Plus Pricing

- Total cost plus pricing is a method of determining the selling price by including all costs (production and non-production costs) of a product and adding a mark up for profit.
- Marginal cost plus pricing is a method of determining the minimum selling price of a product which could at least cover the variable costs of production and target profit required by the company.


## Total cost plus pricing

- Total cost plus is an absorption costing system that attributes all production costs to the individual cost unit.
- When using absorption costing as part of a total cost plus pricing system, we must ensure that the volume of sales provides a mark up that is sufficient to cover the non-production costs that are incurred.
- We must also ensure to include those costs that would continue to be incurred if the item was not produced.
- Total cost plus pricing enables a senior manager to delegate the price setting decision to a front line manager.
- However, a front line manager may reject a sale because a customer only wants to pay a price which is less than the absorption cost but higher than the variable cost of production.
- Therefore, it may be better to sell the product at a low price because it exceeds the variable cost and thus makes a contribution to the fixed costs that would be incurred even if no production takes place.


## Marginal cost plus pricing

- Marginal Costing is a costing system that only attributes variable production costs to the cost unit
- When using marginal costing as part of a cost plus pricing system, we must ensure that the percentage mark up is sufficient to cover the fixed production overhead costs as well as the non-production overhead costs before any profit results.
- Using marginal costing which identifies the variables costs of the item produced gives the lowest price which should be charged in order to avoid a negative contribution.
- However, this will risk a front line operation manager setting a price too low with the result that the contribution earned is insufficient to cover the fixed costs of the business.
- This also makes it difficult for the company to increase the price at a later stage once it has been listed.


## Common to both costing systems

- Both systems can be used when the market-based pricing is difficult or inappropriate to use.
- Both systems are not perfect.
- Other valid points.

Best regards,
Tommy Lau

## Answer 3

Reconcile the contribution between budget and actual

|  |  | HK\$ |
| :---: | :---: | :---: |
| Budget Contribution | (Note 1) | 2,800,000 |
| Sales Variances | (Note 2) | 1,400,000 (F) |
| Materials Variances |  |  |
| - Component X | (Note 3) | 310,000 (A) |
| - Component Y | (Note 4) | 10,000 (A) |
| Labour Variances | (Note 5) | 320,000 (A) |
| Variable O/Hs Variances | (Note 6) | 20,000 (F) |
| Actual Contribution | (Note 1) | 3,580,000 |
| Breakdown as below: |  |  |

## Note 1

Calculation of the Budgeted Contribution
HK\$
Sales

- Component X

5 units $\times 100,000$ units $\times \$ 4$
2,000,000

- Component Y

4 units $\times 100,000$ units $\times \$ 2$
800,000
Labour Cost
4 hours $\times 100,000$ units $\times \$ 10$
4,000,000
Variables O/Hs
100,000 units x \$ 4
400,000
Budget Contribution
7,200,000
2,800,000

Calculation of the Actual Contribution
Sales
HK\$ $120 \times 95,000$ units
$11,400,000$
Costs

| - Component $X$ | 550,000 units $\times \$ 4.2$ | $2,310,000$ |
| :--- | :--- | ---: |
| - Component $Y$ | 450,000 units $\times \$ 1.8$ | 810,000 |
| Labour Cost | 360,000 hours $\times \$ 12$ | $4,320,000$ |
| Variables O/Hs | 95,000 units $\times \$ 4$ | 380,000 |
|  |  | $7,820,000$ |
|  | $3,580,000$ |  |

## Note 2

Sales Variances HK\$
Budgeted Sales 10,000,000
Actual Sales
11,400,000
Variances
1,400,000 (F)

Analysis
a) Sales Volume Variance

Budget Volume
Actual Volume
x Budgeted Selling Price
$\$ 500,000$ (A)
b) Sales Price Variance

Budget Selling Price $\$ 100$
Actual Selling Price \$120
\$20
$x$ Actual Selling Units
$x$ 95,000 units \$ 1,900,000 (F)

## Note 3

Material Variances
A) Component $X$

HK\$
Budgeted
2,000,000
Actual
2,310,000
Variances
310,000 (A)
Analysis

a) | Material Usage Variance |  |
| :--- | :--- |
| Budget Usage | 500,000 units |
| Actual Usage | 550,000 units |
| X Budgeted Purchase Price | 50,000 units |
|  | $\$ 4.0$ |
|  | $\$ 200,000$ | (A)

b) Materials Price Variance
Budget Purchase Price
$\$ 4.0$
Actual Purchase Price $\$ 4.2$

x Actual Purchase Units $\quad$| $\$ 0.2$ |
| ---: |
|  |
| 550,000 units |
| $\$ 110,000(A)$ |

## Note 4

Material Variances
B) Component $Y$
HK\$
Budgeted 800,000
Actual
810,000
Variances
10,000 (A)

Analysis
a) Material Usage Variance

Budget Usage 400,000 units
Actual Usage
450,000 units 50,000 units $\times \quad \$ 2.0$
$\$ 100,000$ (A)
b) Materials Price Variance

Budget Purchase Price $\$ 2.0$
Actual Purchase Price $\$ 1.8$
x Actual Purchase Units
$\begin{array}{ll}x & 450,000 \text { units } \\ \$ 90,000(F)\end{array}$

## Note 5

Labour Variance HK\$
Budgeted 4,000,000
Actual
4,320,000
Variances
320,000 (A)

## Analysis

a) Labour Efficiency Variance
Budget Hours 400,000 hours
Actual Hours
x Budgeted Labour Rate
360,000 hours
40,000 hours
$\$ 10.0$
$\$ 400,000$ (F)
b) Labour Rate Variance
Budget Purchase Price \$10
Actual Purchase Price \$12
\$2
$x$ Actual Hours $x \quad 360,000$ hours $\$ 720,000$ (A)

## Note 6

Variable Overheads Variances ..... HK\$
Budgeted ..... 400,000
Actual ..... 380,000
Variances ..... 20,000 (F)
Analysis
a) Variable O/Hs Efficiency Variance
Budget Hours 400,000 hours
Actual Hours360,000 hours40,000 hours
x Budgeted Labour Ratex\$1.0

$$
\$ 40,000 \quad(F)
$$

b) Expenditure Variance
Budget Rate ..... \$1.0
Actual Rate $(380,000 / 360,000)$ ..... \$1.055
\$0.055
$x$ Actual Hours ..... x 360,000 hoursround off

## Answer 4

Referring to the HKICPA Code of Ethics for professional accountants:

## 1. Self-interest:

The Company will act solely with self-interest to save the potential cost of product recalls and to avoid damage to its reputation.
2. Integrity:

The Company will not act with integrity if it engages in a cover up. Should this issue be uncovered by the public, the company will have even greater damage to its reputation and financial loss.
3. Professional competence and due care:

The Company will not be acting within this principle if it allows tainted materials in the product and allows this situation to continue after being made aware of a potential issue.
4. Professional behaviour:

The Company will not compile with the relevant laws and there is a grave potential that the company and the industry will be brought into disrepute.

The best decision is to draw the attention of the Managing Director to this issue, and plan the necessary actions for the product recalls.

## SECTION B - ESSAY / SHORT QUESTIONS (Total: 50 marks)

## Answer 5(a)

## Pros:

- Some research shows that there is a significant signalling effect on dividend. An unexpected change in the dividend could be regarded as a sign of management's positive view of the future prospects of GR.
- In many instances, the share price would react positively to such an announcement.
- Some pension funds and institutional investors favour high dividends due to their tax-exempted status.
- Those relying on share dividends for income will prefer to receive gains through higher dividends.
- Shareholders subscribing to the Agency Theory, which argues that managers may not always act in the best interests of the owners, will appreciate having the excess cash returned to them.
- There is a view that avoiding a high cash pool in the company can safeguard against hostile takeovers.
- Other valid points.


## Cons:

- In the case where GR requires cash from the shareholders for future development, it will have to raise it through a rights issue; the success of which depends on the prevailing conditions in the equity markets and involves transaction costs.
- There is always reluctance to lower dividends because management prefers to maintain a steady dividend policy. However, the higher dividend to be paid by GR this year may not be sustainable.
- $\quad$ Some institutional investors (e.g. insurance companies and endowment funds) may prefer a steady dividend payout or dividend amount.
- Retail and entertainment are cyclical businesses which are not in a position to sustain the dividend payout in the future.
- There may be information content to dividends. Distributing significant sums of cash resources to the shareholders may be considered by some as an indication that the company has failed to identify investment opportunities for future growth.
- Other valid points.


## Answer 5(b)

An alternative to returning the money to the shareholders is repurchasing / buying back the issued shares.

Share buyback is more common when a company is uncertain about the sustainability of a sharp increase in dividend for a particular year.

For the company, a share buyback is more flexible with regard to execution and adjustment of the cash situation.

However, shares repurchase will reduce the company's equity and affect its Debt/Equity ratio.

By reducing the outstanding shares issued through share buyback can improve certain financial ratios (e.g. DPS, EPS)

Other valid points.

## Answer 6(a)(i)

Interest rate cap - a contract which allows the buyer of the cap the right to fix the interest rates payable at a maximum level. The seller of the cap has to compensate the buyer if interest rates move higher than the agreed level on the fixing dates.

Interest rate swap - an instrument commonly used to hedge the interest rate exposure on longer-dated loans. The buyer of the interest rate swap can swap their floating interest costs to fixed interest costs for the tenor of the swap.

Forward rate agreement - an agreement where two parties agree that the buyer can pay a pre-determined fixed rate beginning with a start date in the future. The contract will specify the termination date as well as the notional value.

## Answer 6(a)(ii)

As Max is of the view that the interest rates can increase sharply, interest rate swap should be the most suitable hedging instrument to reduce the impacts of higher interest rates.

## Interest rate swap

## Advantages

- Rates are fixed at a specified level and not affected by future changes in market rates
- Over-the-counter transactions; flexible on rates and tenor
- No premium is required


## Disadvantages

- Not able to enjoy the benefit if the market moves in your favour
- Not exchange traded, higher risk of counterparty default

Note: Candidates who recommend one of the following two instruments and can provide reasonable arguments in a clear way will also be awarded with marks.

## Interest rate cap

## Advantages

- Over-the-counter transactions; flexible on strike level and tenor
- Limited downside risk
- Opportunity to enjoy favourable movement in interest rates
- Suitable for uncertain market or when lacking firm view on the direction of the market


## Disadvantages

- Premium cost to be paid
- Not exchange traded, higher risk of counterparty default


## Forward rate agreement (FRA)

## Advantages

- Over-the-counter transactions; flexible on rates and tenor
- Rates are fixed at a specified level and not affected by future changes in market rates
- FRA is more liquid for tenor with 12 months or shorter; longer-dated FRA is uncommon or not available
- No premium is required


## Disadvantages

- Not able to enjoy the benefit if the market moves in your favour
- Not exchange traded, higher risk of counterparty default


## Answer 6(b)

| Borrowing (HK\$M) | 5,300 |
| :--- | ---: |
| Cap rate | $1.00 \%$ |
| Cost of cap | $1.05 \%$ |


| 6(b)(i) | Year 1 |  |  |  | Year 2 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Interest cost without cap | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| 3 -month HIBOR | 0.15\% | 0.50\% | 1.05\% | 1.50\% | 2.00\% | 2.45\% | 3.00\% | 3.65\% |
| Borrowing margin | 1.10\% | 1.10\% | 1.10\% | 1.10\% | 1.10\% | 1.10\% | 1.10\% | 1.10\% |
| Total | 1.25\% | 1.60\% | 2.15\% | 2.60\% | 3.10\% | 3.55\% | 4.10\% | 4.75\% |
|  |  |  |  |  |  |  |  | HK\$M |
| Interest Cost | 16.56 | 21.20 | 28.49 | 34.45 | 41.08 | 47.04 | 54.33 | 62.94 |
| Total interest cost | 306.08 |  |  |  |  |  |  |  |


| 6(b)(ii) | Year 1 |  |  |  | Year 2 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Interest cost with cap | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| 3-month HIBOR | 0.15\% | 0.50\% | 1.05\% | 1.50\% | 2.00\% | 2.45\% | 3.00\% | 3.65\% |
| Effective rate with cap | 0.15\% | 0.50\% | 1.00\% | 1.00\% | 1.00\% | 1.00\% | 1.00\% | 1.00\% |
| Borrowing margin | 1.10\% | 1.10\% | 1.10\% | 1.10\% | 1.10\% | 1.10\% | 1.10\% | 1.10\% |
| Total | 1.25\% | 1.60\% | 2.10\% | 2.10\% | 2.10\% | 2.10\% | 2.10\% | 2.10\% |
|  |  |  |  |  |  |  |  | HK\$M |
| Interest Cost | 16.56 | 21.20 | 27.83 | 27.83 | 27.83 | 27.83 | 27.83 | 27.83 |
| Interest costs sub-total | 204.74 |  |  |  |  |  |  |  |
| Premium(*) | 55.65 |  |  |  |  |  |  |  |
| Total | 260.39 |  |  |  |  |  |  |  |


| 6(b)(iii) | HK\$M |
| :--- | ---: |
| Interest cost without cap | 306.08 |
| Interest cost with cap | 260.39 |
|  |  |
| Saving |  |
|  |  |

(*) $\$ 5.3$ billion X $1.05 \%=55.65$

## Answer 7(a)

## Without Netting System

$24 \times(24-1) \times 40 \times \$ 100=2,208,000$

## Answer 7(b)

- Using a netting system can help Grow Fast reduce the amount of actual cash flow and hence the transfers between the group companies.
- Under the netting system, the payments will not be made for every transaction.
- Instead, the payment information is accumulated until the end of a payment period (e.g. monthly) and only the net amount is settled with each of the group companies.
- Usually, one of the subsidiaries or the group's treasury will act as the netting agent.


## Answer 7(c)

(i) Using a Separate Netting Centre
$24 \times \$ 100=\$ 2,400$
Note: A saving of $\$ 2,205,600(\$ 2,208,000-\$ 2,400)$

## OR

(ii) Using one of the existing subsidiaries as a Netting Centre

$$
(24-1) \times \$ 100=\$ 2,300
$$

[Note: Some candidates may assume that the netting of USD and Euro will be conducted separately. Hence, the answer of $\$ 4,800(\$ 2,400 \times 2)$ for (i) and $\$ 4,600(\$ 2,300 \times 2)$ for (ii) will also be acceptable.]

