FP

Chartered Accountant
SINGAPORE

Singapore CA Qualification (Foundation) Examination

13 June 2022

Accounting for Decision Making

INSTRUCTIONS TO CANDIDATES:

1. The time allowed for this examination paper is **3 hours 15 minutes**.

2. This examination paper has **FOUR (4)** questions and comprises **SIXTEEN (16)** pages (including this instruction sheet and Appendix A). Each question may have **MULTIPLE** parts and **ALL** questions are examinable.

3. This is a restricted open book examination. You are allowed to have only the following materials with you at your exam location:

   - One A4-sized double-sided cheat sheet
   - One A4-sized double-sided blank scratch paper

4. During the examination, you are allowed to use your laptop and any calculators that comply with the SAC's regulations. Please note that watches, mobile phones, tablets, and all other electronic devices **MUST NOT** be used during the examination.

5. During the examination, videos of you and your computer screen will be recorded for the purpose of ensuring examination integrity and you have consented to these recordings.

6. This examination paper and all video recordings of this exam are the property of the Singapore Accountancy Commission.

MODULE-SPECIFIC INSTRUCTIONS:

7. Assume that all dollar amounts are in Singapore dollar (S$) unless otherwise stated.

8. All computations should be presented up to **TWO (2)** decimal places, unless otherwise stated.

IMPORTANT NOTICE:

If you are not feeling well, please do not press "Start Assessment". If you have started and leave during the exam, you would be deemed to have attempted the paper.

ISCA INSTITUTE OF SINGAPORE CHARTERED ACCOUNTANTS

SINGAPORE ACCOUNTANCY COMMISSION

e-Exam Question Number

VERY IMPORTANT NOTICE

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1. Your question paper is attached under the **"Resource"** tab found at the bottom right of **EACH** question.

Other important information:

2. You will **only be allowed** to access the Excel function from your computer.

3. You are **NOT ALLOWED** to access any websites or reference materials (except for your A4 sized double sided cheat sheet) during the exam.

4. You are **NOT ALLOWED** to print the question paper.

5. **Please take note that your screen will be monitored throughout the examination. If you are found to have accessed unauthorised materials or websites, or if you cheat or attempt to cheat, you will be liable to severe disciplinary action.**

   Should you encounter any issues during the exam, please call the following number:

   +65 6100 0516

6. **You do not need to fill in an answer for this question.**

Question 1 – (a), (b), (c) and (d)

IsoAudio Solutions (IAS) produces precision hi-fi accessories aimed at the audiophile. Its customers demand the very best.

IAS is considering the launch of a new product – IsoFoot – designed to reduce sound distortions by absorbing speaker cabinet vibrations. It consists of a precision manufactured footplate that a speaker sits on.

The product would be produced for 3 years before becoming obsolete. Sales are likely to be 2,000 units in year 1, 4,000 units in year 2, and 3,000 units in year 3. Following market research, a suitable price is considered to be $750 per item. IAS aim to achieve a 50% gross margin on their products.

The estimated cost of production would be as follows:

Investment in machinery: $1,000,000. This would be housed in the current factory and would take 20% of the floor space. Assume that IAS has no alternative use for the floor space. Factory rent is $500,000 per year. The machinery would be worth 10% of the initial cost after 3 years. A machine operative would be specifically employed and paid a wage of $20 per hour and would work a regular 35-hour week for 48 weeks of the year. Each IsoFoot would take up 2 hours of his time. There would be 3 kilogrammes of material in each IsoFoot, costing $100 per kilogramme to purchase. 5,000 kilogrammes are already in inventory, which was purchased for $80 per kilogramme one year ago but was not utilised. IAS has no other use for this material, so if not used on this project, it would be sold for scrap at a price of $20 per kilogramme. Other variable costs amount to $50 per item.

Alternatively, the whole manufacturing process could be outsourced, for a cost of $400 per IsoFoot. The manufacturing outsource contract would cover the entire product life.

e-Exam Question Number	**Question 1 required:**	
2	**(a)**	Calculate the forecast cost per item of the IsoFoot product if it is manufactured by IAS, assuming relevant costing principles apply. Justify the inclusion and exclusion of amounts in your calculation of the relevant cost of producing an IsoFoot. **(11 marks)**
3	**(b)**	Discuss THREE factors IAS should consider when deciding whether to make the product itself or buy it in from the outsource manufacturer. Provide a **reasoned recommendation** as to which they should do. **(8 marks)**

IAS uses target costing in its planning processes. It aims to close the forecast cost gap (the difference between forecast cost and target cost) before production starts.

e-Exam Question Number	Question 1 required:
4	**(c)** Calculate the forecast cost gap assuming IAS decides to buy in the IsoFoot product from the outside manufacturer. **(2 marks)**
5	**(d)** Discuss TWO possible ways of closing the cost gap. **(4 marks)** **(Total: 25 marks)**

Question 2 – (a) and (b)

The Right Clothes (TRC) sells fashionable clothing and accessories. They are planning their winter range and are considering the launch of the 'Urbane' range of Coats, Hats and Gloves.

Information relating to each is as follows:

	Coat	**Hat**	**Pair of gloves**
Sales price per unit ($)	300	100	50
Variable cost per unit ($)	100	25	30
Fixed cost per unit ($)*	50	30	5
Budgeted volume (units)	1,000	2,000	5,000

**The fixed costs are incremental to the entire 'Urbane' range and include, for example, specific machinery to be acquired for manufacturing those garments. No 'Urbane' items can be made at all without this expenditure.*

e-Exam Question Number	**Question 2 required:**
6	**(a)** Assuming the Coats, Hats and Gloves are sold in the same proportion as the budgeted quantities, calculate and show all computations for: **(i)** The breakeven quantities for each product; and **(12 marks)** **(ii)** The breakeven revenue for each product and in total. **(4 marks)**
7	**(b)** For the 'Urbane' range, calculate the overall minimum breakeven sales, in quantity and in dollars, if TRC can sell any volume of any product (up to the budgeted maximum volume for each product). Show all computations. **(9 marks)** **(Total: 25 marks)**

Question 3 – (a) and (b)

Work At Home (WAH) specialises in installing home offices including furniture and equipment.

Recent extracts from their financial statements:

Work At Home (WAH) **Statement of Profit or Loss**	
	$'000
Sales	3,225
Cost of Sales	(1,420)
Gross profit	1,805
Expenses	(595)
Operating profit	1,210
Finance costs	(50)
Profit before tax	1,160
Taxation at 17%	(197.2)
Profit after tax	962.8
Dividend	240.7

Work At Home (WAH) Statement of Financial Position		
	$'000	**$'000**
Non-current assets – Net Book Value		1,425
Inventory	150	
Receivables	362	
Cash	109	
Payables	(251)	
Net working capital		370
		1,795
Financed by:		
Ordinary share capital	10	
Retained reserves	1,285	
Total equity		1,295
10% Long term loan – repayable in 10 years' time		500
		1,795

The Finance Director would like your assistance in preparing the master budgets for next year for the Statement of Profit or Loss and the Statement of Financial Position.

Compared to last year:

- Revenues are expected to grow by 25%. Sales prices will remain the same as the previous year.
- **Gross margin** is expected to improve by 5% (i.e. the gross margin percent will increase by 5) from the current gross margin percentage.
- 75% of expenses are fixed. Fixed expenses are expected to increase by 5%. Variable expenses per unit are expected to stay the same as the previous year.
- Finances charges will remain unchanged.
- Receivables days (calculated as [Receivables / Sales] x 365) are expected to reduce by 10 days compared to the previous year.
- Payables days (calculated as [Payables / Cost of Sales] x 365) will stay the same at the previous year.

- Inventory is expected to remain at the same level as the previous year.
- Interest on the loan and tax is paid in the year to which the expense relates.
- The dividend pay-out ratio is expected to remain the same as the previous year.
- There are no planned additions or disposal of non-current assets. Depreciation is applied at a rate of 10% reducing balance, included within fixed expenses.

Assume 365 days in a year.

e-Exam Question Number	**Question 3 required:**
8	**(a)** Using the statements from last year as a template, construct the following master budgets for the coming year. Present your answers to the nearest dollar:
	(i) Statement of Profit or Loss; and **(12 marks)**
	(ii) Statement of Financial Position **(8 marks)**

The sales team have reviewed the draft budget and have complained that the growth forecast of 25% is unachievable. They think a growth rate of 5% would be more realistic.

e-Exam Question Number	Question 3 required:
9	**(b)** Discuss THREE possible consequences of imposing the 25% growth target and **recommend** what should be done to incorporate the sales team's comment.
	(5 marks)
	(Total: 25 marks)

Question 4 – (a), (b) and (c)

CoolWind Airconditioning (CWA) makes desktop air-conditioning units. It operates 2 divisions: Manufacturing and Assembly. Each division is based in a different country.

The Manufacturing division supplies Compressors to the Assembly division, who then assembles the final product for onwards sale. One compressor is needed for each final aircon product sold by the assembly division. The Assembly division buys all the other parts it needs from external suppliers.

The Manufacturing division can also sell the Compressors externally. It also sells another product, a modified unit, that it sells to fridge/freezer manufacturers (known as the 'FreezerPump').

The Manufacturing division has capacity to produce 50,000 units – 1 Compressor unit uses the same production capacity as one FreezerPump. The Assembly division can buy Compressors from a local external supplier at a price of $105 per unit. Each division can choose who they buy from and sell to.

Key information relating to each division:

	Manufacturing division		**Assembly division**
	Compressor	**FreezerPump**	**Final aircon product**
External unit sales price ($)	100	120	300
Unit variable cost ($)	50	75	125*
Fixed cost per unit ($)**	20	20	30
Maximum external demand	20,000	25,000	10,000

*excluding the cost of purchasing Compressors.

** represents an element of existing overheads that are unavoidable.

The Board are discussing transfer pricing policy. The Operations Director says: “Who cares what the transfer price is? The Manufacturing division’s revenue is the Assembly division’s cost, so it all cancels out when we look at the whole company.”

The Finance Director disagrees and says: “You’re ignoring the impact the transfer price will have on decision making in each division. We need to decide whether to use a cost-plus approach or base it on market prices.”

e-Exam Question Number	**Question 4 required:**	
10	**(a)**	Explain the FOUR main objectives of transfer pricing in this case. **(8 marks)**
11	**(b)**	For each of the cost-plus and market-based approaches, discuss TWO advantages and TWO disadvantages of each approach in this case. **(8 marks)**
12	**(c)**	Recommend ONE suitable transfer price per unit for the supply of all 10,000 Compressors to the Assembly division that will optimise the profits of the company as a whole. Assume the price chosen will be in the middle of the suitable range. **(9 marks)** **(Total: 25 marks)**

END OF PAPER

Appendix A – Common verbs used by the Examiners

Verb	Description
Calculate / Compute	Do the number crunching and derive the correct answer. Make sure that you write down your workings and crosscheck your numbers.
Discuss	**Discuss** requires you to provide the 'for' and 'against' arguments, you cannot have a discussion without opposing views otherwise it would be just a conversation. If **discuss** is placed near the front of the instruction, then it requires you to provide an answer that is similar to **explain** but addresses both the for and against arguments.
Explain	**Explain** requires you to write at least several sentences conveying how you have **analysed** the information in a way that a layperson can easily understand the concept or grasp the technical issue at hand.
Justify	Whenever you see the word **justify** you <u>must</u> provide reasons for your answer, in other words, provide support for your argument or conclusion. If you fail to **justify** your answer, you will lose valuable marks. **Justify** is similar to **defend**.
Propose/ Provide	Put forward (for example, a point of view, idea, argument, alternatives, etc.) for consideration or action. For instance, "Based on the facts of the case, **propose** the most tax-effective entity type …", or "**Propose** audit adjusting entries to correct …".
Use / Using	This instruction tells you the type of model that you must **use** when formulating your answer. For instance, "**Using** the <u>Discounted Cash Flow approach</u>, …" tells you what valuation approach to use. Another common phrase is "**Using** the facts of the case, ...", which tells you that you must relate your answer to the specific facts given in the question scenario. Generic answers are unlikely to pass.
Recommend	Make a statement about the most appropriate course of action. If there is more than one possible course of action, **state** which action you would choose and why (**justify** your choice). Your professional judgment and your ability to **interpret** the wider situation are critical to scoring well in these types of questions. Don't forget to think about the future and the past, not just the present when making a **recommendation**.