

Singapore CA Qualification (Foundation) Examination

24 June 2024

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 **FIFTEEN (15)** 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 ISCA's regulations. Please note that smartwatches, 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 Accounting and Corporate Regulatory Authority.

MODULE-SPECIFIC INSTRUCTIONS:

7. Assume that all dollar amounts are in Singapore dollar (S\$) 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.

****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 6028 9811

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

Question 1 – (a), (b), (c) and (d)

Set for Pets (SFP) is considering launching a new range of accessories for dog owners: bowls, beds and leads.

Information relating to ONE unit of each new product is as follows:

\$	Bowl	Bed	Lead
Sales price	30	150	50
Materials	12	30	25
Labour	3	30	5
Other variable costs	5	50	5

The new products will be manufactured in a new factory that will cost \$60,000 a month to rent. It is estimated that for every bed sold, 2 leads and 3 bowls are likely to be sold.

Identical bowls could be bought in as completed units from a subcontractor. They would cost \$22 each. If the bowls were bought in, the beds and leads could be manufactured in a smaller factory, costing \$50,000 a month. SFP expects to sell 10,000 bowls a month.

**e-Exam
Question
Number**

Question 1 required:

- 2** **(a)** Calculate and conclude whether SFP should make the **bowls** or buy them in. **(5 marks)**
- 3** **(b)** Assuming SFP make the bowls, calculate the break-even level of output and sales revenue per month by product assuming the constant sales mix. **(8 marks)**
- 4** **(c)** Assuming SFP make the bowls, calculate the margin of safety expressed as a percentage of budgeted sales for the new product range. **(5 marks)**

Question 1 cont.

The new product range would be sold by the Dog Accessory division and would require an investment of \$18 million in machinery. The decision has now been taken to make the bowls in-house. The forecast performance of the division for the year without the new product range is as follows:

	\$'m
Revenue	50
Divisional operating profit	20
Interest	1.5
Divisional investment	60
Cost of Capital	15%

**e-Exam
Question
Number**

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Question 1 required:

- (d) Calculate the annual Residual Income of the Dog Accessory division with and without the new product range, and conclude whether the Divisional Manager is likely to want to proceed with the launch. Ignore depreciation. **(7 marks)**

(Total: 25 marks)

Question 2 – (a), (b) and (c)

EMJ is a listed company that makes 2 products, the 'X' and the 'Y'. Information relating to the coming year is as follows:

	X	Y
Expected sales in units	12,000	18,000
Price per unit (\$)	40	30
Material T needed per unit	1 kg	2 kg
Material W needed per unit	3 litres	2 litres

Inventories are analysed as follows:

	Opening	Required closing
X	2,000 units	1.5 months of inventory sales
Y	3,000 units	1 month of inventory sales
T	4,000 kgs	3,000 kgs
W	1,000 litres	2,500 litres

1 kg of T costs \$10, and 1 litre of W costs \$5. Over the year 1,000 litres of W are lost through evaporation in the warehouse. 20% of X and Y that have been produced is wasted due to damage. Orders need to be placed well in advance for the raw materials as they can be difficult to source.

**e-Exam
Question
Number**

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Question 2 required:

- (a) Prepare the following operational budgets:
- (i) Total revenues; **(2 marks)**
 - (ii) Production volumes; and **(4 marks)**
 - (iii) Materials purchase volume and total cost. **(7 marks)**

The Production Manager is not keen to be held to account for his performance to budget. He says: 'There's too many variables over the year; the whole budgeting process is a waste of time!'

**e-Exam
Question
Number**

7

Question 2 required:

- (b) Explain THREE reasons why EMJ needs to prepare budgets. **(6 marks)**

Question 2 cont.

The Production Manager was recently promoted into the role. He was previously a production line worker. The Board of Directors are concerned that the Production Manager is not aware of his responsibilities as a Manager.

**e-Exam
Question
Number**

8

Question 2 required:

- (c)** Explain the THREE primary responsibilities of a Manager, using the EMJ Production Manager as the example to explain each responsibility.

(6 marks)

(Total: 25 marks)

Question 3 – (a), (b) and (c)

Senang Fish Farm (SFF) is located in the Straits of Singapore, and intensively farms Barramundi, Grouper and Red Snapper fish. The farm costs \$1 million a year to run.

Each fish can be sold straight out of the water for customers to skin and prepare, or the fish can be filleted before being sold. All three are sold in filleted form.

Additional information is provided below:

	Barramundi	Grouper	Red Snapper
Price for unprocessed fish per kg (\$)	20	40	28
Price for filleted fish per kg (\$)	30	55	40
Variable costs for filleting per kg (\$)	6	7	4
Volume of fish (kg)	5,000	10,000	20,000
Incremental fixed costs for filleting each fish type	25,000	50,000	80,000

1,500 kgs of the filleted Red Snapper is also processed further and sold in pots as 'sweet and sour red snapper' ready meals. These sell for \$15 per pot (with each pot containing 100g of red snapper) and have variable costs per pot of \$5 (excluding the snapper). The incremental fixed costs for preparing the ready meals are \$95,000 per year.

**e-Exam
Question
Number**

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Question 3 required:

- (a) Calculate and conclude:
- (i) If each type of fish should be filleted or sold in its unprocessed form; **(4 marks)**
 - (ii) If filleted red snapper should be processed further into ready meals; and **(3 marks)**
 - (iii) Based on the answers in **parts (a)(i) and (ii)**, if the fish farm is profitable overall. **(4 marks)**

At a recent Management Board Meeting, the Marketing Director commented on some bad press the fish farms had been given recently about poor sustainability – for example, the damage to the local environment caused by the unnatural concentration of fish, and the use of antibiotics. In addition, the carbon footprint is noticeably higher for farmed fish compared to wild fishing. The Finance Manager noted though that remedying these sustainability concerns costs money with uncertain benefits, so they should not be undertaken.

**e-Exam
Question
Number**

10

Question 3 required:

- (b) Explain FOUR ways that sustainability creates business value **in this case.** **(8 marks)**

Question 3 cont.

The Finance Manager is looking to hire an assistant and has found a promising candidate from a manufacturing business. He is concerned, however, that this type of business is very different to the fish farm.

**e-Exam
Question
Number**

11

Question 3 required:

- (c)** Explain THREE differences between Merchandising, Manufacturing, and Service Organisations and how these affect the accounting system in the organisation.

(6 marks)

(Total: 25 marks)

Question 4 – (a), (b) and (c)

DTD propulsion is an engineering business that makes electric propulsion systems for various forms of transport. It has recently been in discussion with a potential new client that is interested in buying 50,000 motors for electric flying vehicles for use on islands around the world. DTD hopes that this is the first of many contracts, so it is keen to offer a price that equates to the relevant costs of delivering on the contract. The Production Director is paid a salary equivalent to \$500 a day and has already spent 10 days developing a specification for what he has called 'Project X'. He also took the client for a business lunch at a cost of \$1,500, which would not have happened otherwise.

A Forming Machine would be required for Project X. DTD already has an existing Forming Machine that would be worth \$750,000 if sold today, and is being used on existing projects with a value of \$1 million to DTD. An equivalent machine can be purchased for \$800,000.

400 hours of Painting Machine time would be required for Project X. The machine is already leased at a cost of \$600 per week, and costs \$100 per hour to run. It has sufficient spare capacity for the project.

The research department was due to be shut down this week, incurring redundancy costs of \$2,500,000 for staff paid \$800,000 a year. If they were used on Project X, they would be given a 10% pay rise, but be made redundant in one year's time at a cost of \$2,750,000.

Skilled labour is in short supply. 250,000 skilled labour hours are available per year. A total of 100,000 hours is needed for Project X, but there are only 60,000 hours of spare capacity under a guaranteed wage agreement of \$25 per hour. The remainder can either be sourced by paying overtime at twice the usual hourly rate, or diverting labour from its current work. The labour is currently employed making 'Zoomers', which take 4 hours each, and generate a contribution margin of \$80 per Zoomer.

Material Z is a rare earth metal used in motor production. 10,400 kgs would be needed for the contract, and 4,000 kgs, which was bought at \$100 per kg, are currently in inventory. Material Z costs \$140 per kg to buy now. It can only be purchased in batches of 1,000 kgs and is used regularly by the business.

Head office costs are absorbed at a rate of \$75 per standard skilled labour hour (excluding overtime), to pay for head office administration. As a result of Project X, this rate will need to increase to \$80 per skilled labour hour for the year.

A markup of 20% of the cost is regularly applied to contracts to contribute towards other fixed costs and profit.

**e-Exam
Question
Number**

Question 4 required:

12

(a) Calculate the relevant cost of Project X, justifying the amounts included. Explain why items are excluded if that is the case.
(18 marks)

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(b) Before sending the quotation out, explain TWO non-financial factors that should be considered in this case.
(4 marks)

Question 4 cont.

The Chief Executive Officer reviewed the quotation before sending it out and has added 25% of the annual factory rent on the basis that the project would occupy 25% of the factory. He says, 'The factory rent has to be paid for somehow; this reflects Project X's share of the cost.'

**e-Exam
Question
Number**

14

Question 4 required:

- (c) Explain ONE key difference between management and financial accounting, using the comment made by the Chief Executive Officer to illustrate your point.

(3 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.
Conclude	Form a judgment, or determine the outcome, or resolve an issue, by using the facts presented. An example might be "Conclude whether to outsource the human resource function".
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.
Illustrate	Illustrate requires you to provide an example, either from the facts given, a real-life example, or a made-up example to illustrate the point you are trying to make. Illustrate and Demonstrate have similarities.
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 .
Prepare	Prepare requires you to produce your answer using a specific format. For instance, " Prepare the Statement of Cash Flows for ..." or " Prepare all the relevant journal entries for ...".
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.