



Singapore CA Qualification (Foundation) Examination

26 June 2023

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 **ELEVEN (11)** 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 ACRA'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 Accounting and Corporate Regulatory Authority.

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.

e-Exam
Question
Number

1

****VERY IMPORTANT NOTICE****

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 0518

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

Question 1 – (a), (b) and (c)

James owns a fast-food restaurant – ‘Ethifresh’ – that specialises in vegan food.

Demand has grown quickly, and James can currently sell all the food he can make during the 12 hours a day the restaurant is open.

The burger section has 3 operations that must be completed in this order:

- 1) ‘Mix’ – Make the burger – Each one is made fresh. There are 2 mixing stations.
- 2) ‘Cook’ – Cook the burger – There are 3 cooking stations.
- 3) ‘Finishing’ – Prepare toppings and bread roll, assemble and wrap. There is 1 finishing station.

Each station can deal with any burger on the menu. James sells 3 different types of burgers on the menu: the Black bean Bellyfiller (BB), the Jackfruit Jumbo (JJ) and the Tofu Triple (TT).

The time taken at each stage for each burger, **in seconds**, is as follows:

| | BB burger | JJ burger | TT burger |
|-----------|------------------|------------------|------------------|
| Mix | 100 | 75 | 85 |
| Cook | 310 | 250 | 190 |
| Finishing | 60 | 80 | 45 |

**e-Exam
Question
Number**

2

Question 1 required:

- (a)** Calculate the throughput volume per hour for each operation (to one decimal place where applicable), and conclude which operation – Mix, Cook, or Finishing – is the limiting constraint.

(7 marks)

All staff are paid a salary of \$1,000 a month. Each station is operated by one staff member. Restaurant costs (other than allocated salaries and ingredients) amount to \$25,000 a month. The restaurant is open every day. Assume a month is 30 days long.

The burger price, ingredient costs and apportioned salary costs per burger are:

| | BB burger | JJ burger | TT burger |
|---------------------------|------------------|------------------|------------------|
| Sales price (\$) | 14 | 10 | 12 |
| Ingredient costs (\$) | 8 | 6 | 7 |
| Apportioned salaries (\$) | 3 | 1.5 | 2 |

James is concerned about a new competitor that is taking market share, so he is now planning for demand to reach a maximum of 30 of each type of burger per hour.

**e-Exam
Question
Number**

3

Question 1 required:

(b) Calculate the optimum production plan per hour (in whole numbers of burgers) to maximise profits using throughput contribution as a basis. Also, conclude how many burgers James should aim to produce in an hour. **(12 marks)**

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(c) James is considering adding one more cooking station. Assuming the limiting constraint remains as before, calculate how much extra throughput contribution would be earned per hour. Assume a whole number of burgers only.

(6 marks)

(Total: 25 marks)

Question 2 – (a) and (b)

Crystals For You (CFY) takes natural gemstones and prepares and polishes them as ornaments and for use in crystal healing techniques.

At the start of period 7, opening work in progress (WIP) consisted of 50 units which are 100% complete in materials, 60% in labour and 30% in overheads. The value of this opening WIP are as follows:

| | \$ |
|-----------|-----|
| Materials | 800 |
| Labour | 360 |
| Overheads | 60 |

During period 7, in addition to the opening WIP, a further 2,050 units were added into the production process. The costs incurred in the period were:

| | \$ |
|-----------|--------|
| Materials | 45,100 |
| Labour | 32,608 |
| Overheads | 16,424 |

At the end of period 7, closing WIP consisted of 80 units which are 100% complete with respect to materials, but only 60% complete with respect to labour and overheads.

There were no normal or abnormal losses in the period.

**e-Exam
Question
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Question 2 required:

5

- (a)** Calculate the equivalent units of production for period 7, for each of the materials, labour and overheads, assuming a First In First Out (FIFO) approach to the opening WIP.

(11 marks)

6

- (b)** Assuming a FIFO approach to the opening WIP for period 7, calculate:

- (i)** The cost per equivalent unit for each of the materials, labour and overheads. **(3 marks)**

- (ii)** The value of the finished goods transferred out of the production process. **(7 marks)**

- (iii)** The value of the closing WIP. **(4 marks)**

(Total: 25 marks)

Question 3 – (a) to (e)

'IT for the masses' (ITM) is considering the launch of the 'Ring Click Mouse' (RCM). The RCM is a ring that is worn on the finger and operates like a computer mouse for the wearer. The user can move their hand on the desk or in mid-air to move the mouse pointer on the screen and tap the finger on the desk for a mouse click.

The projected volume of sales would be 50,000 units in the first year, growing at 10% year-on-year for the following 4 years, at which point it is anticipated the technology is likely to be replaced. After the fifth year, sales are expected to fall to around 250 units as a small number of customers directly replace their old RCM with an exact replacement rather than with a newer device. The price of an RCM will be \$200 per unit at launch, falling to \$150 after 1 year, and \$100 after 2 years, at which level it will remain until year 6, when the sales price will fall to \$75 per unit for the remainder of the product lifecycle.

Materials will be \$20 per unit for the first year, inflating by 5% per unit each year compared to the previous year. Other variable costs amount to \$10 per unit and are expected to stay at this level.

The initial investment will be \$15 million, with a scrap value of \$5 million after 5 years, and zero after 10 years. The company depreciates on a straight-line basis.

The company on the whole generates a return on investment of 20%, however the division that would invest in the project is earning 30% return on investment. The Divisional Manager makes investment decisions for their division.

**e-Exam
Question
Number**

Question 3 required:

- | | |
|-----------|--|
| 7 | (a) Explain and discuss whether the project should be appraised over 5 years or 10 years. (4 marks) |
| 8 | (b) Calculate the expected revenues each year over the first 5 years. (5 marks) |
| 9 | (c) Calculate the expected total variable costs for each year over the first 5 years. (5 marks) |
| 10 | (d) Calculate the average annual Return on Investment Percentage over the first 5 years, based on the initial investment. (5 marks) |
| 11 | (e) Explain the decision the Divisional Manager is likely to make based on your calculations from part (d) . Discuss whether this is likely to be optimal for the company as a whole. (6 marks) |
- (Total: 25 marks)**

Question 4 – (a) and (b)

Orchard Electronics Singapore (OES) is a retail store located in an expensive but popular part of Orchard Road. The store also doubles as a warehouse for inventory. Established in 1960, it is a well-known local brand that is trusted by customers and suppliers alike. It has a premium brand approach – higher prices but better service in terms of pre-sales advice and after sales support, which customers really appreciate. OES faces some competition from other physical retail stores, but it is most concerned about competition from online retailers. The owner of OES, Charlotte, has noticed a frustrating trend of shoppers coming to the OES store to try out electronics that they then purchase from elsewhere, presumably online.

Charlotte set up a website 8 years ago to advertise the store, but it contains largely static information and is out of date. The number of monthly views is now negligible. She is more active on social media, where once a month she views postings and responds as appropriate. Unfortunately, one particular complaint went unanswered for several weeks, causing a particularly aggressive ‘keyboard warrior’ style rant that cannot be removed.

The online competitors are mainly large multinational retailers. However, there is a local online firm – Singapore Discount Electronics (SDE) – that operates out of an industrial unit in South Malaysia that specifically targets the Singapore marketplace. Prices are much lower than OES and their brand is well known locally, but they have only been in business for 5 years.

There is an industry-wide concern at present about the longevity of household appliances. Environmental groups are pushing for consumer protection legislation to be enhanced to allow consumers to return goods that fail much later after the purchase date than currently. The hope is that this reduces the number of scrapped and replaced appliances.

Sales are falling every month, and Charlotte needs a plan to turn this around – the bank has threatened to call in its overdraft that is close to its limit. There are more

ambitious banks in the marketplace, however, they are offering development loans to businesses looking to expand.

**e-Exam
Question
Number**

Question 4 required:

12

(a) Construct a SWOT analysis by identifying, explaining AND JUSTIFYING TWO each of strengths, weaknesses, opportunities and threats of OES.

(16 marks)

13

(b) Use the SWOT analysis **from part (a)** to recommend AND JUSTIFY THREE strategic options for OES.

(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. |
| 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". |
| 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. |
| Identify | Identify is similar to list, but requires you to also provide an explanation as to why the item/s that you have identified is/are relevant to the facts given in the question. |
| 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 . |
| 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 . |
| 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. |