

Singapore CA Qualification (Foundation) Examination**7 December 2018****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. This means that you are allowed to only bring the following materials into the examination hall:
 - One A4-sized double-sided cheat sheet.
4. During the examination, you are allowed to use your laptop and any calculators that comply with the SAC's regulations. Please note that mobile phones, tablets, and all other electronic devices **MUST NOT** be used during the examination.
5. This examination paper is the property of the Singapore Accountancy Commission.

MODULE-SPECIFIC INSTRUCTIONS:

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

Question 1 – (a), (b), (c) and (d)

Sentosa Electronics Ltd (SEL) produces a key component for use in the biotechnology industry. SEL has a 31 December year end. SEL has experienced rapid sales growth in its operating regions for the past 3 years. To meet this growth, SEL has expanded its processing capabilities. Recently, SEL has been facing stiff competition in their operating regions due to the maturity of the industry. Hence, management is very concerned about the performance of the company.

The management accountant at SEL has prepared her variance analysis for the latest year ending 20x7 as follows:

	Master budget	Actual	Variance	(F)avourable or (U)nfavourable
Sales – units	10,000	12,000	2000	F
	S\$'000	S\$'000	S\$'000	
Sales	1,500	1,750	250	F
Material	(500)	(575)	(75)	U
Labour	(300)	(310)	(10)	U
Production overheads	(400)	(500)	(100)	U
Selling and distribution	(100)	(100)	-	-
Profit	200	265	65	F

Unfortunately, the overspend with respect to material, labour and overhead will need an explanation. The management accountant has booked a meeting with the factory manager and she expects this to be a difficult conversation given the factory manager has underperformed.

Additional Information:

1. A higher grade of skilled labour was used in the factory due to increased production requirements, which was paid \$40 per hour rather than the budgeted \$30 per hour.

2. The actual price per kilogram of materials was as budgeted. 1 kilogram of material per component is required per the standard cost card.
3. Production overheads in the budget are 60% fixed cost and 40% variable costs.
4. Selling and distribution costs in the budget consist of 50% fixed cost and 50% variable costs.
5. There were no opening or closing inventories.

**Exemplify
Question
Number**

Question 1 required:

- 1** **(a)** Explain the likely impact on the factory manager's motivation and subsequent performance of using the existing variance report as a basis for assessing the factory manager's performance. **(4 marks)**
- 2** **(b)** Prepare a more appropriate variance report to use as a basis for the performance evaluation. **(4 marks)**
- 3** **(c)** Compute as many variances for sales, materials and labour in as much detail as the available information allows. Give ONE possible explanation for each variance you compute. **(13 marks)**
- 4** **(d)** Explain how the flexed budget calculations might differ if they were prepared using throughput accounting principles. Assess if this would be an appropriate analysis in this case. Further calculations are not required. **(4 marks)**
- (Total: 25 marks)**

Question 2 – (a), (b), (c) and (d)

Changi Pharmaceuticals Ltd (CPL) is a manufacturer of drugs and operates in a highly competitive market. It has traditionally focused on standard costing and variance analysis as a major part of its internal controls.

The manufacturing environment has changed in recent times. The modern environment demands flexibility – different customers want different things, for example bespoke packaging or package sizes and they are very quality conscious. This has necessitated a just-in-time approach to manufacturing which means when orders come in, the factory has to respond and make those items as they are requested.

A couple of years ago, the board was becoming increasingly concerned with the number of complaints that have been made by customers, especially since the significant period of growth they have experienced over the last couple of years. From 1 January 20x7, they attempted to increase their focus on quality management.

The board has recently decided to produce a cost of quality report to assess their performance so far. The production director is proud of his efforts in this area – ‘Training is paying off, and our quality costs are down. This period of complaints is all but over!’

The following is an extract from some preliminary work done by a junior analyst in your department:

Quality Costs:	20x6	20x7
	S\$'000	S\$'000
Training	200	300
Warranty claims	175	200
Inspection costs	350	100
Product redesign to reduce components	40	100
Disposal of faulty items on inspection	400	170
Gifts given to customers as a result of complaints	255	375
Quality accreditation work	50	60
Legal fees as a result of faulty products	275	350
Revenue	146,000	150,000

CPL's biggest customer, the Singapore Government, is however increasingly vocal in its concerns about quality.

**Exemplify
Question
Number**

Question 2 required:

5 **(a)** Explain why focussing solely on traditional variances may not be suitable in a modern manufacturing environment such as that of Changi Pharmaceuticals Ltd. **(6 marks)**

6 **(b)** Prepare a cost of quality report for 20x6 and 20x7. Include in your report, the percentage of total quality costs represented by each of the four main categories and the total quality costs as a percentage of turnover.

Present your answers using the following format:

For year 20X6:

Name of Category 1

Name of Item 1 = S\$ Amount

Name of Item 2 = S\$ Amount

Subtotal = S\$ Amount in 20X6 (XX%)

(9 marks)

7 **(c)** Interpret the cost of quality report, giving possible explanations for the movements year-on-year. **(7 marks)**

**Exemplify
Question
Number**

The Singapore government is a major customer of Changi Pharmaceuticals Ltd. As such, they want to make sure their supplies from Changi Pharmaceuticals Ltd represent Value for Money. The Value for Money Framework considers performance in three areas:

Economy – the cost of inputs.

Efficiency – the volume of output given the volume of input.

Effectiveness – the quality of output.

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- (d)** Give ONE Key Performance Indicator for each of the three dimensions that the government may measure in respect of its supplies from Changi Pharmaceuticals Ltd. **(3 marks)**
- (Total: 25 marks)**

Question 3 – (a), (b), (c) and (d)

Sembawang Kitchens Pte Ltd (SKL) is a kitchen fitting company based in the north of Singapore. It was recently approached by a large residential contractor to install a kitchen in the first apartment of a large and exclusive development. SKL is keen to work for this contractor, and want to price the contract to ensure they win the work. SKL's owners only stipulation is that all relevant costs are covered by the price quoted.

The financial accountant at SKL put the first draft of the quotation (called 'Job 101') together while you were on holiday and has asked you to check his work and revise the quote where appropriate.

Quotation – Job 101

		S\$
	Note	
Cabinets (20 units x \$50 per unit)	1	1,000
Screws (200 x \$0.25 per unit)	2	50
Unskilled Labour (150 hours at \$10 an hour)	3	1,500
Skilled Labour (150 hours at \$20 an hour)	4	3,000
Caustic soda	5	100
Appliances	6	3,000
My time on quote preparation (2 days x \$185 per day)	7	370
Total variable costs		9,020
Head office costs (20% of total head office costs)	8	2,255
Total costs		11,275
Mark-up on cost (10% of total costs)	9	1,127.50
Price		<u>12,402.50</u>

Note 1

20 cabinets will be needed. The current purchase price is \$60 each. 10 are in stock already, and cost \$50 each 6 months ago. They could be sold second hand for \$30. They are now regularly used by the business.

Note 2

Screws will need to be purchased. They cost \$25 for a box of 100.

Note 3

Unskilled labour is paid a wage equivalent to \$10 an hour. Half of the work needed on Job 101 can be absorbed in idle time, the other half will need to be done as overtime, paid at 1.5 times their regular hourly wage.

Note 4

Skilled labour is in short supply and is fully occupied on other work which generates a contribution of \$20 an hour. Skilled labour is paid \$20 an hour. Job 101 can either be done by diverting labour away from existing work, or again by paying overtime at a rate of 1.5 times their regular hourly wage.

Note 5

Site preparation will include using a tub of caustic soda, which cost \$100 four years ago. It was purchased for a similar job that fell through. If it is not used for Job 101, it would need to be disposed of safely at a cost to SKL of \$50.

Note 6

Appliances relate to the cost of the oven, refrigerator, freezer, hob and dishwasher. The total price of \$3,000 is the current purchase cost, the breakdown of which includes a 30% mark-up to cover the supplier's overheads.

Note 7

I have worked for 2 days on this quotation, including sourcing the appliances. My salary equates to \$185 a day.

Note 8

25% is added to cover a share of head office costs.

Note 9

10% is what we charge as a mark-up to make our profit.

**Exemplify
Question
Number**

Question 3 required:

9

- (a)** Revise the quotation, justifying revisions that you make, and clearly stating the minimum price that should be charged for Job 101.

Present your answers using the following format:

Name of Item 1 = (Workings) = **S\$ Answer**

Name of Item 2 = (Workings & Workings) = **S\$ Answer**

Name of Item 3 = (Workings) = **S\$ Answer**

Total = S\$ Answer

(13 marks)

10

- (b)** Explain the implications of setting prices using relevant costing with future work for this customer. **(5 marks)**

Relevant costing principles used in the preparation of the quotation are different from those used in external financial reporting.

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- (c)** Explain FOUR differences between management accounting and financial accounting. **(4 marks)**

**Exemplify
Question
Number**

12

During the installation project for the first kitchen, the SKL site manager is concerned about time overruns.

- (d)** Evaluate how he may manage this using the quality, cost and time triangle.

(3 marks)

(Total: 25 marks)

Question 4 – (a), (b), (c), (d) and (e)

The Lambda Corporation has two subsidiaries: Alpha and Omega. Alpha was only set up 12 months ago, whereas Omega has been in existence for many years.

The group produces cakes. Omega makes a basic cake, which is then either sold externally or transferred internally to Alpha for specialist icing and decorations. Omega can satisfy external demand fully if no internal transfers are made. However, external and internal demand cannot be satisfied fully within Omega's capacity.

Below is the recent performance of each division for the **month of January 20x7**:

	Omega	Alpha
	\$'000	\$'000
Sales	1,500	2,000
Materials	(500)	(750)
Labour	(200)	(250)
Packaging	(100)	(150)
Overheads – division	(100)	(200)
Overheads – head office	(50)	(50)
Divisional profit	550	600

Assume that profits are earned evenly throughout the period.

	Omega	Alpha
Net investment in subsidiary at the end of January 20x7	\$48 million	\$60 million

The Group's Return on Capital Employed is 14% which is set as the target for each division to beat. The Group's Cost of Capital is 10%.

The divisional manager of Alpha is considering investing in new equipment to print edible photographs onto the cakes. It would cost \$1,000,000 and would add an estimated \$120,000 to profit per year.

**Exemplify
Question
Number**

Question 4 required:

13

- (a)** Calculate the following two financial measures for each division for 20x7 and comment on whether each division is achieving its targets:

- (i)** Controllable Return on Investment; and **(3 marks)**
- (ii)** Controllable Residual Income. **(3 marks)**

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- (b)** Compare and comment on the performance of the divisions, including an assessment of how fair the comparisons are. **(5 marks)**

15

- (c)** Assess the likely decision of Alpha division's manager on whether or not to invest in the new equipment, assuming Return on Investment is the principal divisional performance measure, and comment on whether this is optimal for Lambda Corporation. Assume the group's objective is to maximise shareholder wealth. **(4 marks)**

16

- (d)** Outline the FOUR main objectives of transfer pricing, and recommend the approach that should be adopted in this case for transferring the basic cakes from Omega to Alpha. **(5 marks)**

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- (e)** Discuss and explain the implications to the group if Omega division is evaluated as a cost centre as opposed to an investment centre. **(5 marks)**

(Total: 25 marks)

END OF PAPER

Appendix A – Common verbs used by the Examiners

Verb	Description
Analyse	Identify the key components, look for similarities and differences, look for patterns or outliers, and weight up the issues. If there is numerical data, you might need to provide a range of answers depending on how you substitute the data into your model. Make sure you state any implications of your answer and any assumptions that you make.
Assess	Make a judgment about the value, quality, outcomes, results, or size. Often there will be a qualifier in the instruction, which will tell you exactly what to assess . For instance, “ Assess the adequacy of the disclosures in the financial statements relating to ...”. Professional judgment and scepticism (a questioning mind) are called for when making an assessment .
Calculate / Compute	Do the number crunching and derive the correct answer. Make sure that you write down your workings and crosscheck your numbers.
Comment	Comment is similar to evaluate in that you are required to make a judgment or provide your opinion based on the facts at hand. Professional scepticism and professional judgment are called for when commenting .
Compare	Compare requires you to show how things are similar and/or different. You must indicate both the similarities and differences.
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.
Evaluate	Pass judgment on or provide your opinion based on the facts at hand. The key here is to give your opinion or make a judgment of the facts, but providing just a description of the facts is insufficient.
Interpret	Look at the whole as well as the individual parts and decide what the data (or diagram) is telling you. Remember, although interpret may involve some subjective assessment, some answers will be more right (or appropriate) than others.
Outline	Outline requires you to provide a general overview of the situation and indicate the main features.
Prepare	Prepare requires you to produce your answer using a specific format.