

May and August 2025  
Operational Case Study  
CGMA Professional Qualification  
Full post exam support materials

Below are the full post-exam supporting materials for the Operational Case Study Exam.  
Use the links on this page to jump to the documents required.

#### Pre-seen material

May and August 2025 Operational Case Study [pre-seen](#).

#### Examiner's report

The May and August 2025 [examiner's report](#).

#### Exam variants

- [Variant 1](#)
- [Variant 2](#)
- [Variant 3](#)
- [Variant 4](#)
- [Variant 5](#)
- [Variant 6](#)

#### Suggested solutions

- [Suggested solutions for variant 1](#)
- [Suggested solutions for variant 2](#)
- [Suggested solutions for variant 3](#)
- [Suggested solutions for variant 4](#)
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- [Suggested solutions for variant 6](#)

#### Marking Guidance

- [Marking guidance for variant 1](#)
- [Marking guidance for variant 2](#)
- [Marking guidance for variant 3](#)
- [Marking guidance for variant 4](#)
- [Marking guidance for variant 5](#)
- [Marking guidance for variant 6](#)

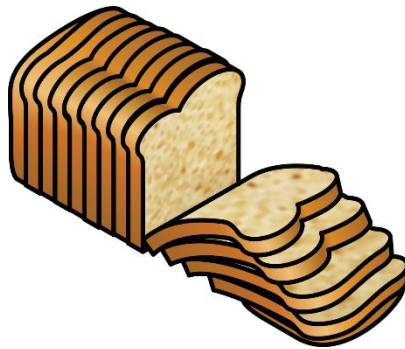
If you need any further information please [contact us](#).

# Operational Case Study Examination

**May 2025 – August 2025**

**Pre-seen material**

## Halfpenny



### **Context Statement**

*We are aware that there has been, and remains, a significant amount of change globally. To assist with clarity and fairness, we do not expect students to factor these changes in when responding to, or preparing for, case studies. This pre-seen, and its associated exams (while aiming to reflect real life), are set in a context where current and on-going global issues have not had an impact.*

*Remember, marks in the exam will be awarded for valid arguments that are relevant to the question asked. Answers that make relevant references to current affairs will, of course, be marked on their merits.*

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## Your role

You are a Finance Officer working within the Finance Department of Halfpenny. You are principally involved in the preparation of management accounting information and providing information to managers to assist with planning and decision making. At times, you are also expected to assist with the preparation of the financial statements and answer queries regarding financial reporting and other financial matters.

## Company background

Halfpenny is a company that produces and sells packaged bread. The company is based in Keeland, a small country in Europe where the currency is K\$.

The company was founded in 1891, when Martha and Bert Halfpenny started baking and selling bread and other bakery items from a single small bakery store. By 1905, there were three bakery stores and, by 1912, there were 10, all within a 20 kilometre radius of the first. In 1916, production of all bread and bakery items was moved to a single purpose-built bakery. The company continued to grow steadily in the 1920s and 30s and, by 1940, the bakery had been expanded and the number of stores was 30.

In 1948, Joseph Halfpenny, the grandson of Martha and Bert, became Managing Director and majority shareholder of the company. Joseph drove significant change in the company and, by 1952, the company no longer had its own stores and was entirely focused on the production of bread, which was sold to grocery stores in central Keeland.

Until 1952, all bread loaves sold by Halfpenny were unsliced and unpackaged. In 1952, Joseph invested in what was, at the time, state-of-the art machinery to slice and package loaves in Halfpenny-branded waxed paper. This innovation coincided with advancements in the ingredients used in bread production, which extended the shelf-life of a bread loaf. Throughout the 1950s, 1960s and 1970s, the company continued to grow steadily.

The early 1980s was a period of rapid growth for the company, principally due to the boom in supermarkets. Increasingly, shoppers wanted the convenience of a single store for all of their food needs and moved away from high streets and small independent grocery stores to supermarkets, which were often in out-of-town locations. During this period, Halfpenny, (with Paul Halfpenny, Joseph's son, as Managing Director) secured contracts with the three leading national supermarket chains to supply them with packaged bread loaves.

In 1985, the company relocated its bakery to a new Production Facility. This has been expanded upon over the years but is still the location where all of the company's products are made. This is in central Keeland. The company also has a Distribution Centre, opened in 1999, which is located next to the Production Facility.

Halfpenny currently produces a range of sliced packaged bread loaves and packaged bread rolls (the latter added in 1999). Until recently, senior management has focused on these core products, continually striving to improve taste, texture and shelf-life. Recently though, as a result of a slowing down in growth, consideration has been given to extending the product range. To this end, Harry Chang has recently been appointed Product Development Director.

Halfpenny is still owned by the Halfpenny family and two of Paul's children now run the company: Trey Halfpenny, Managing Director, and Rosa Grimble, Sales & Marketing Director. The latest financial statements for the year ended 31 December 2024 show revenue of K\$332 million, gross profit of K\$90 million, operating profit of K\$30 million and that the company had 2,208 employees.



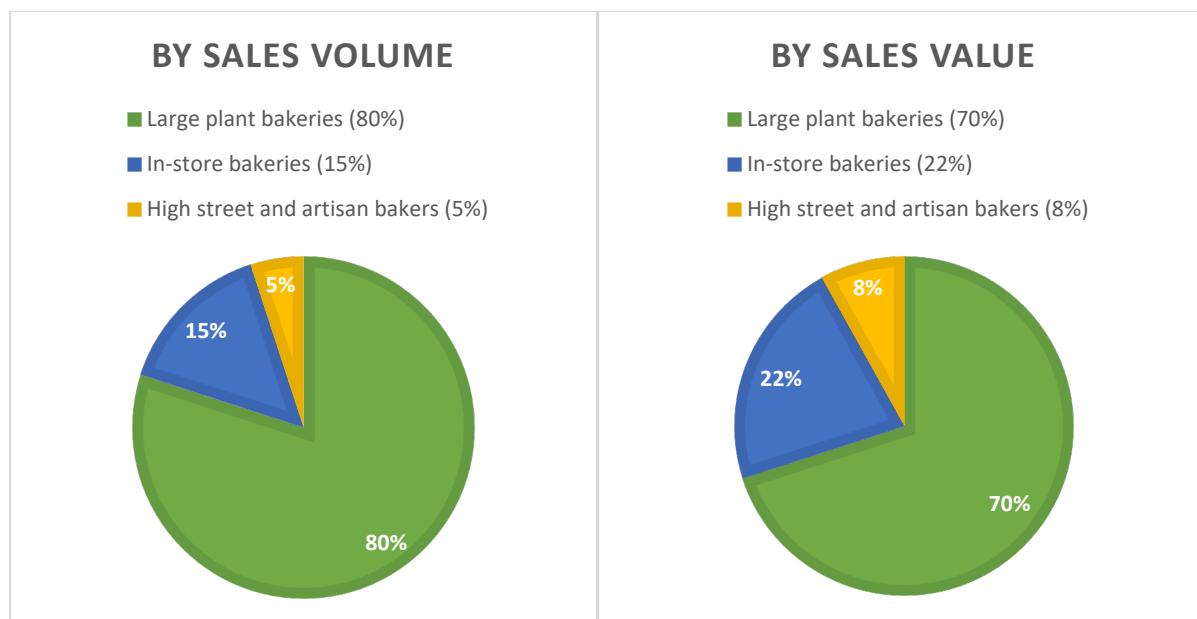
## The bread industry in Keeland

Bread is a staple food in Keeland. The market was worth over K\$2.5 billion in 2024 and the products included in this are bread loaves, bread rolls and speciality bread items (such as pita bread, crumpets and English muffins).

There are three categories of bread producers in Keeland:

Large plant bakeries	<ul style="list-style-type: none"> <li>❖ Mass producers that make pre-packaged bread products with an extended shelf life.</li> <li>❖ Typically sell products business to business rather than direct to the consumer.</li> </ul>
In-store bakeries	<ul style="list-style-type: none"> <li>❖ Located within supermarkets, baking daily.</li> <li>❖ Typically sell products unpackaged (and loaves unsliced) and so have a shorter shelf-life compared to pre-packed products.</li> <li>❖ Sales are business to consumer.</li> </ul>
High street and artisan bakers	<ul style="list-style-type: none"> <li>❖ Small scale producers that make unpackaged bread products with a limited shelf-life.</li> <li>❖ Sales can be business to business and business to consumer.</li> </ul>

The market share of each category of producer in 2024 was as follows:



There are five large plant bakeries in Keeland. Four of these large plant bakeries, one of which is Halfpenny, are well known brands in Keeland and produce bread which is only sold under their respective brand names. The other large plant bakery makes bread for supermarkets to sell under their own branding.

The market for pre-packaged bread has declined over the past 5 years. This is partly due to a switch towards fresher artisan bread and partly because of an overall reduction in demand for bread due to health reasons.

## Article - Future Trends Series: Innovations Shaping Bread Production

### BREADTECH DIGEST

#### Future Trends Series: Innovations Shaping Bread Production

As food production continues to evolve, bread — one of humanity's oldest and most fundamental food staples — remains at the forefront of innovation. Our industry is witnessing a transformation driven by technological advancements, changing consumer preferences and sustainability considerations. Here, we explore the future trends that are poised to redefine the landscape of bread production.



*Freshly baked Pain de Campagne*

#### Sustainable and Eco-Friendly Practices

Sustainability is a key driver of innovation in the bread industry. Bakeries are adopting eco-friendly practices to minimise their environmental footprint. This includes sourcing ingredients from sustainable farms, reducing energy consumption through energy-efficient ovens and implementing waste management systems to recycle or repurpose by-products. The push towards sustainable packaging, such as biodegradable or recyclable materials, is also gaining momentum.

#### Health and Wellness Trends

Consumer demand for healthier bread options is shaping production practices. The rise of low-carb, high-protein and gluten-free diets has led to the development of new formulations that cater to these preferences. Bakers are experimenting with alternative flours made from almonds, chickpeas and other grains to create nutritious and diverse products. Fortification of bread with vitamins, minerals and probiotics is also becoming popular, aligning with the trend towards functional foods.

#### Artisanal and Specialty Breads

Despite the rise of automation, there is a growing consumer appetite for artisanal and specialty breads. These products, often characterised by traditional production techniques, unique flavours and high-quality ingredients, appeal to consumers seeking authenticity and culinary experience. Bakers are balancing automation with craftsmanship to produce breads which offer the best of both worlds: efficient production and the personal touch.

#### Personalisation and Customisation

The trend towards personalisation is also making its way into bread production. Advanced production techniques and digital ordering systems enable bakeries to offer customised bread options. Customers can select ingredients, specify dietary restrictions and even design their own bread shapes and sizes. This level of customisation enhances consumer satisfaction and loyalty.

## Plant-Based Ingredients

The plant-based movement is influencing bread production as well. The use of plant-based ingredients, such as plant proteins and dairy alternatives, is expanding. These innovations cater to the growing number of vegetarians, vegans and flexitarians, while also contributing to the sustainability goals of reducing reliance on animal-based products.



*Plant-based proteins in baking are becoming more popular*

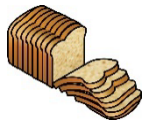
## Advanced Baking Techniques

Innovative baking techniques are pushing the boundaries of traditional bread production. High-pressure processing (HPP), for instance, extends shelf life without the need for preservatives. Fermentation processes are being refined to enhance flavour and nutritional value. Cold plasma technology is being explored for its potential to improve the safety and quality of bread products by reducing microbial load.

## Conclusion

As automation and smart technologies become more integrated, the industry will see significant improvements in efficiency and product quality. Concurrently, the push for sustainability, health-conscious products and customisation will drive innovation in ingredients and production methods. For bakers and bread producers, staying ahead of these trends will be crucial to thriving in an increasingly competitive and dynamic market.

## Extracts from the Halfpenny website



[Our Story](#)

[Our Mission](#)

[Our Products](#)



### Our Story

**1891:** Martha and Bert Halfpenny open the first bakery store selling cakes, pies and bread



**1916:** A purpose-built bakery now serves our 10 bakery stores



**1948 - 1952:** The company focuses on the production of bread and all bakery stores are closed



**1985:** Our new purpose-built Production Facility starts to operate



**1980 - 1985:** Demand for packaged, sliced bread sky-rockets and our white loaf is #1 in Keeland



**1952:** The famous Halfpenny sliced white and wholemeal packaged loaves are born!



**1999:** We improve our recipes and add packaged rolls and a multi-seed loaf to our range



**2011:** Halfpenny is rebranded to what you see today







**2018:** The rustic loaf is added to the range and we are voted best packaged wholemeal loaf for the 3rd year running

## Our Mission

Our mission is to be the #1 choice for packaged, sliced bread and packaged bread rolls in Keeland. To achieve this, we aim to:

- ❖ Give you the best tasting bread in a range of flavours.
- ❖ Use the highest quality flour and ingredients.
- ❖ Source ingredients from sustainable suppliers that we treat fairly.
- ❖ Be carbon neutral by 2040.

Our Products	
<b>Bread loaves</b>  All of our bread loaves are a standard 800g and are pre-sliced as either regular or thick cut. Packaged in waxed paper to seal in freshness and softness. Perfect for sandwiches or toasting!	
<b>White</b>  Our classic white loaf.  Using white flour made from wheat grain that has been refined and processed to remove bran and germ.	
	<b>Wholemeal</b>  Now our most popular, the classic wholemeal loaf.  Using wholemeal flour made from the whole wheat grain. Retains most of the bran, germ and endosperm from the wheat.  A loaf packed full of fibre, vitamins, minerals and antioxidants.
<b>Multi-seed</b>  Gaining in popularity, our multi-seed loaf.  Using wholemeal flour with added seeds and grains for additional texture, flavour, fibre, healthy fats, vitamins and minerals.	
	<b>Rustic</b>  Our most recent addition to the range, the rustic seeded bloomer loaf.  Using coarse-grain wholewheat flour, with added seeds and grains, baked as a bloomer loaf.
<b>Bread rolls</b>  White, wholemeal, multi-seed and rustic available in packs of 6 bread rolls (overall weight per pack 400g).	



## The Directors



### Managing Director: Trey Halfpenny

Trey, 49, is a direct descendent of Martha and Bert Halfpenny and became Managing Director in 2010. Trey has worked in the production side of the business since he was 18 and, over the past 10 years, has driven modernisation of the Production Facility.



### Sales & Marketing Director: Rosa Gimble

Rosa, 47, is the sister of Trey Halfpenny. Rosa has a degree in marketing and worked for a marketing agency before joining the family business in 2006. She has been instrumental in creating the current Halfpenny branding.



### Product Development Director: Harry Chang

Harry, 42, recently joined the business, having previously worked in product development at one of Halfpenny's main competitors. Harry is a talented baker and is keen to increase the range of products offered by the company.



### Production Director: Jack Hobbs

Jack, 45, has worked in the Production Facility since he was 16 and has experience in all areas of production. He became Production Director in 2018 and has been working closely with Trey Halfpenny to modernise production processes.



### Distribution Director: Syed Hussain

Syed, 58, has been in post for 15 years, having previously worked for a global logistics company. In recent years, Syed has worked to make the distribution process more sustainable by replacing diesel vehicles with electric vehicles and improving delivery scheduling.



### Finance Director: Lottie Phipps

Lottie, 36, has been Finance Director for 2 years, having worked her way up through the company. Lottie has built good relationships with finance providers and believes that there is scope for the company to grow through expansion into new products.



### Human Resources Director: Samira Kuma

Samira, 44, is a recent addition to the Board, having previously worked at a food manufacturing company. Samira is a firm believer that an incentivised workforce is a more productive workforce and has just introduced a new bonus scheme.

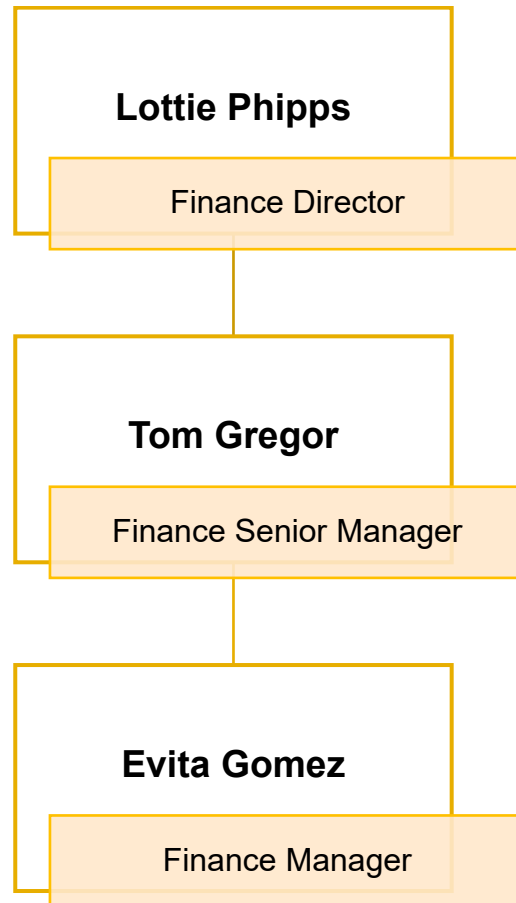


### IT Director: Benjamin Juma

Benjamin, 38, is also new to the Board, in a role which has recently been created (previously IT fell under the remit of the Finance Department). Benjamin has experience in manufacturing technology and is keen to implement more of this in the production process.

## Management teams

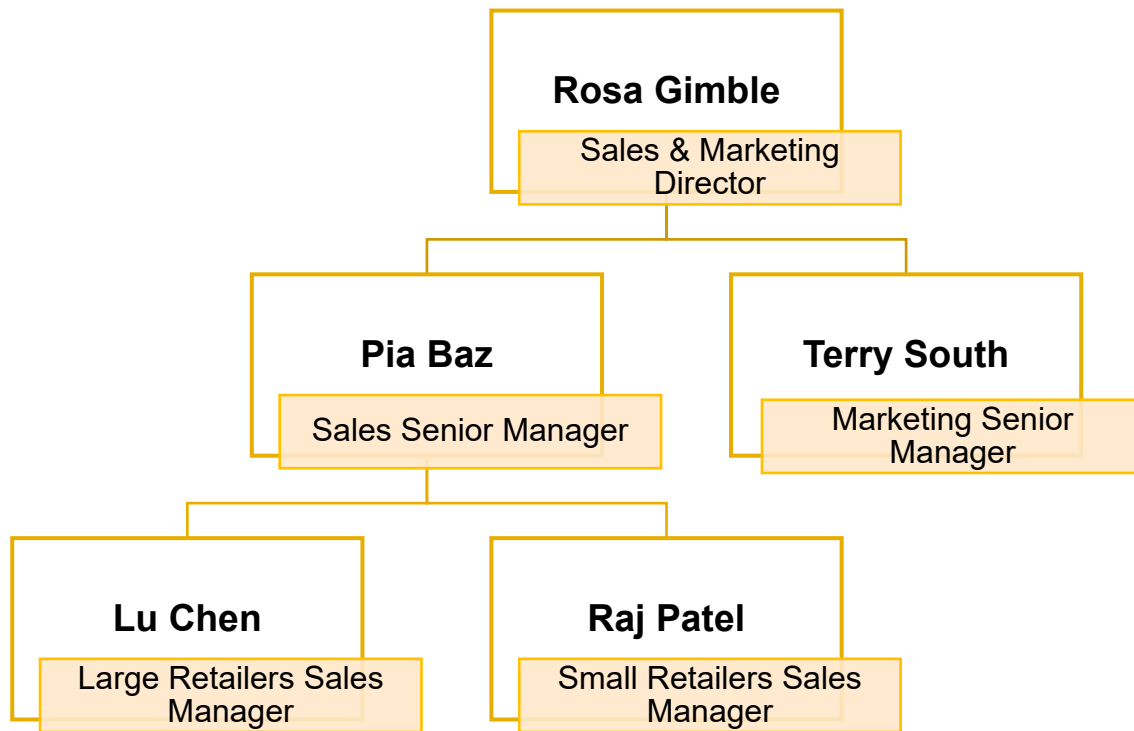
### Finance



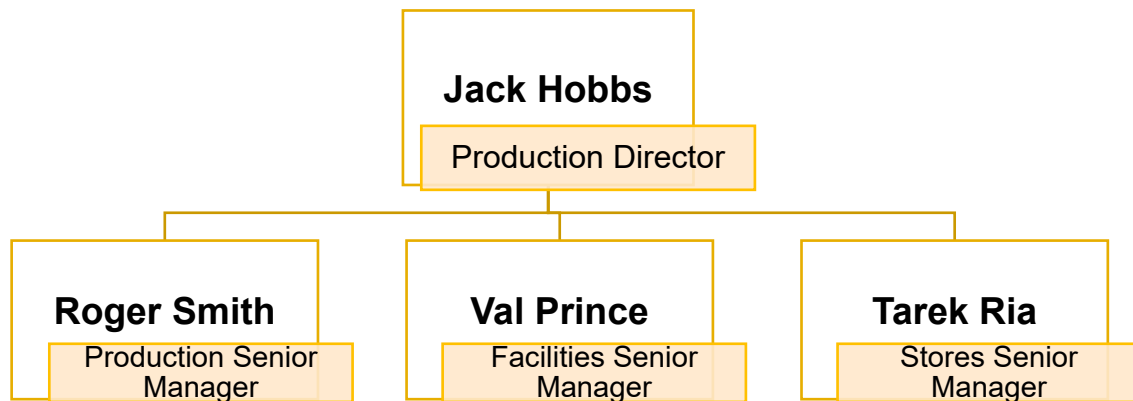
The above finance managers are supported by six finance officers (of which you are one) and eight finance assistants.



## Sales & Marketing



## Production



The following managers report directly to Roger Smith:

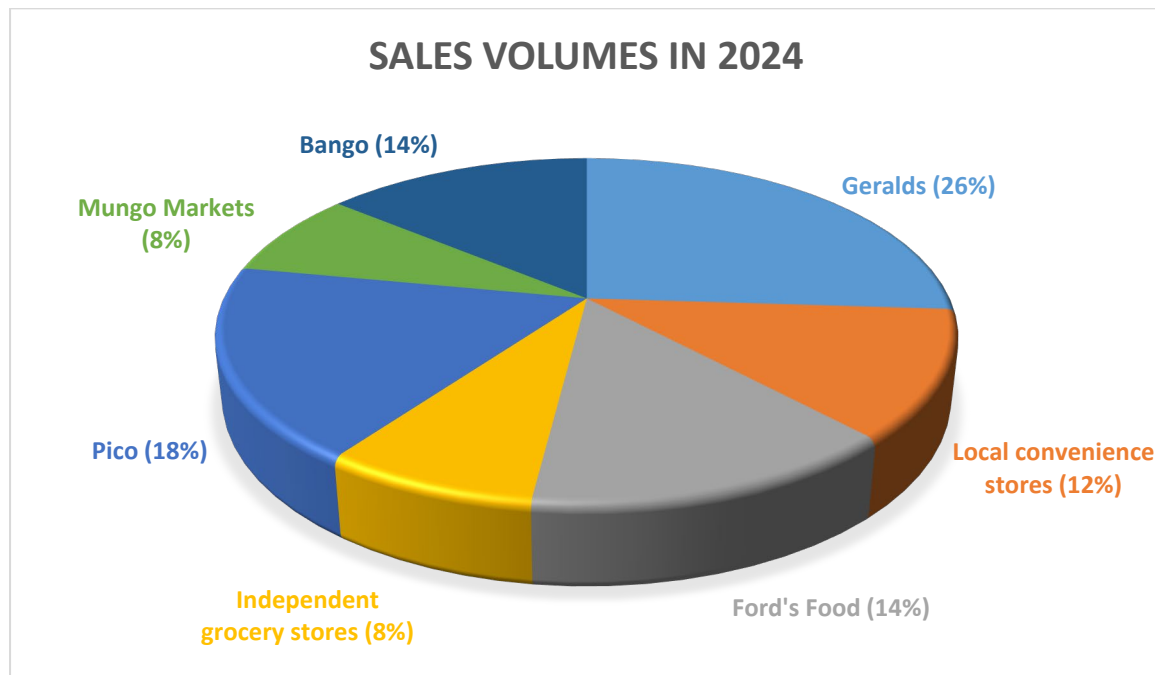
- ❖ Mixing & Kneading Manager – Sam Goss
- ❖ Shaping & Proving Manager – Rita Duma
- ❖ Baking Manager – David Good
- ❖ Cooling Manager – Jonas Ghandi
- ❖ Packaging Manager – Stu Bell

## Other information about company operations

### Sales channels

Halfpenny sells all of its products business to business (B2B). The company does not currently sell direct to consumers (B2C). Information about all of Halfpenny's products, such as ingredients and nutritional qualities, is available to view on the company website. However, consumers cannot order from the website but can purchase from a range of retailers.

All of the company's sales are to retailers that operate in Keeland. For the year to 31 December 2024, the split of the company's sales volumes was as follows:



Gerald's, Pico, Ford's Food, Bango and Mungo Markets are all large supermarket chains that operate nationally across Keeland. These five retailers are classed as large retailers by Halfpenny. Lu Chen, Large Retailers Sales Manager, and her team are responsible for managing relationships with these five retailers.

There are four local convenience store chains that operate stores throughout Keeland, either nationally or in a particular region. There are 75 independent grocery store retailers that either operate a single store or a small number of stores. Local convenience stores and independent grocery stores are classed as small retailers. Raj Patel, Small Retailers Sales Manager, and his team are responsible for managing relationships with these retailers.

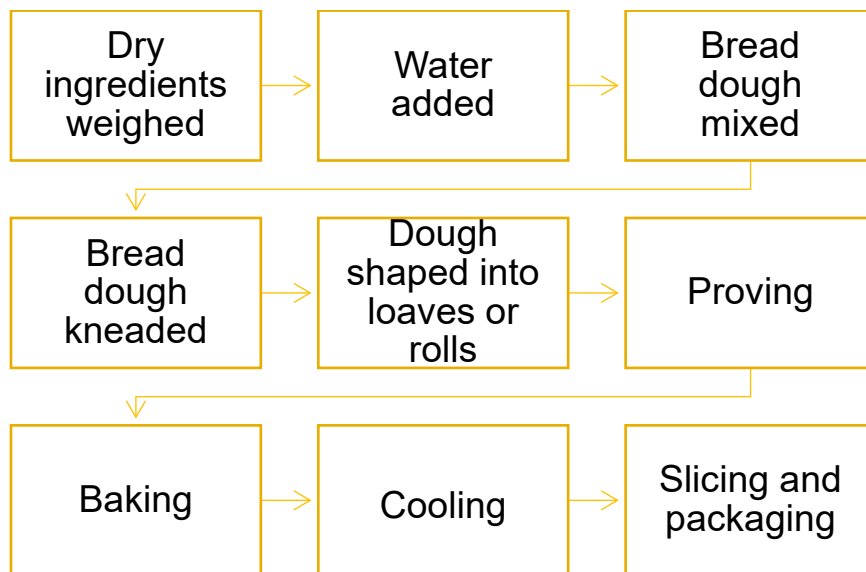
Sales prices and credit terms vary by retailer and are negotiated by the respective sales team. On average, sales prices for large retailers are 20% lower than for small retailers. Credit periods for large retailers range from 40 to 60 days and for small retailers 20 to 40 days.

## Production

All products are made at the company's Production Facility which is in operation 360 days a year.

Production occurs in batches. For 800g loaves, the batch size is 2,500 loaves and for 400g packets of rolls, the batch size is 2,500 packets. Therefore, each batch of loaves requires twice as much bread dough as a batch of rolls. The bread dough recipe used for each type of loaf or roll is the same (for example, all White Loaves and White Rolls are made from the same bread dough recipe).

The production process is summarised below:



Within the Production Facility, there are five production departments:

- ❖ Mixing & Kneading
- ❖ Shaping & Proving
- ❖ Baking
- ❖ Cooling
- ❖ Packaging

These production departments are supported by four service departments:

- ❖ Raw Materials Stores
- ❖ Machinery Maintenance
- ❖ Facilities Maintenance
- ❖ Employee Canteen

Details in relation to Raw Materials Stores and the production departments are as follows:

<b>Raw Materials Stores</b>	<ul style="list-style-type: none"> <li>❖ The main dry ingredients used in Halfpenny's bread dough are flour (white, wholemeal and course-grain wholewheat), fast action dried yeast, salt and seeds &amp; grains (the latter for Multi-seed and Rustic products).</li> <li>❖ Flour is stored in large silos, other dry ingredients in smaller silos and yeast in large, sealed bags.</li> <li>❖ Ingredient deliveries occur daily and each delivery is received into an empty silo to ensure that control is maintained over the provenance of the raw materials.</li> <li>❖ Each silo is cleaned before every delivery.</li> <li>❖ Raw Materials Stores is located next door to the Mixing &amp; Kneading Department.</li> </ul>
<b>Mixing &amp; Kneading</b>	<ul style="list-style-type: none"> <li>❖ Each ingredient silo is attached via a pipe to the large mixing &amp; kneading machines located in the Mixing &amp; Kneading Department.</li> <li>❖ Each mixing &amp; kneading machine is capable of mixing &amp; kneading bread dough for a single batch of either loaves or rolls (the machines for rolls are smaller than those used for loaves).</li> <li>❖ At the start of production, the dry ingredients required for a batch of production are weighed and fed into the bowl of the machine from the silos. This is a computer-controlled process.</li> <li>❖ These dry ingredients are mixed by machine and then the right amount of water is added to create the bread dough.</li> <li>❖ Once formed, the dough is kneaded by the machine. This kneading process stretches the dough, which develops the gluten strands. This is important as it allows the dough to trap air and lets the bread rise.</li> <li>❖ The kneaded dough is rested for 15 minutes before it is moved to the next production process.</li> </ul>
<b>Shaping &amp; Proving</b>	<ul style="list-style-type: none"> <li>❖ The rested dough is tipped out of the mixing &amp; kneading machine by hand onto the production line which moves it to the Shaping &amp; Proving Department.</li> <li>❖ Here, machinery divides the dough into pieces suitable for a single loaf or bread roll.</li> <li>❖ These pieces are shaped into balls of dough by machine and then rested again.</li> <li>❖ The dough balls are then shaped by machine to fit either a loaf pan or a roll pan (note that a single roll pan contains 6 rolls).</li> <li>❖ The pans then move into a proving machine. Proving is the process of allowing the bread dough to rest in a temperature-controlled environment. In this process, the yeast ferments the dough, which generates gasses which allow the dough to increase in size. This makes the bread softer and lighter once baked.</li> </ul>
<b>Baking</b>	<ul style="list-style-type: none"> <li>❖ After proving, the pans of loaves or rolls move along the production line into an oven, where they are cooked for 15 or 20 minutes (depending on the type of bread). At the end of the baking process, the pans are removed from the oven and then the baked items are removed from the pans by machine.</li> </ul>
<b>Cooling</b>	<ul style="list-style-type: none"> <li>❖ The baked loaves and sets of six rolls then move along the production line into the cooling machine where they are allowed to cool slowly for 2 hours.</li> </ul>
<b>Packaging</b>	<ul style="list-style-type: none"> <li>❖ Once cooled, the loaves and rolls are transported to the packaging line, where loaves are sliced (either as thick or regular cut) and all items are packaged. Date labels are attached and the items sent to the Distribution Centre for onward delivery.</li> </ul>

## Raw materials and suppliers

The main raw materials used in production are as follows:

<b>Flour</b>	<ul style="list-style-type: none"><li>• There are three types of flour used by Halfpenny: white, wholemeal and coarse-grain wholewheat.</li><li>• Each type of flour is sourced from suppliers that specialise in milling wheat to produce that type of flour. There are two white and two wholemeal flour suppliers and one coarse-grain wholewheat flour supplier</li><li>• All flour suppliers are located within 50 km of the Production Facility. Payment terms from flour suppliers range from 20 to 30 days.</li></ul>
<b>Yeast</b>	<ul style="list-style-type: none"><li>• Yeast is a living microorganism that is prevalent in the natural world and is necessary in order for bread to rise.</li><li>• Halfpenny uses fast action dried yeast, which is a granular powder made from dehydrated yeast microorganisms. Once hydrated during the production process, this dried yeast becomes active.</li><li>• Yeast is sourced from a single supplier that the company has used for over 20 years. It is purchased in bulk to take advantage of bulk purchase discounts and payment terms are 30 days.</li></ul>
<b>Grains and seeds</b>	<ul style="list-style-type: none"><li>• The grains used by Halfpenny include rye, oats, buckwheat and quinoa. The seeds include pumpkin, sunflower, flax and sesame seeds.</li><li>• These ingredients are sourced from multiple suppliers and sourcing decisions are usually made on the basis of lowest cost.</li><li>• Payment terms range from 30 to 60 days.</li></ul>

## Distribution

The company has its own Distribution Centre, which is located next door to the Production Facility. Throughout the day, finished loaves and packets of rolls are transferred into the Distribution Centre on pallets. Each type of loaf and packet of rolls has its own dedicated area in the Centre.

From the date of production, Halfpenny loaves and rolls have a use-by-date of up to 2 weeks. Within the Distribution Centre, the aim is that products are despatched within 2 days of production to retailers for sale to the end customer. This requires careful rotation of inventory in date order.

The company has its own fleet of delivery vehicles and employs its own drivers. The vehicles in the fleet vary from small trucks to large heavy goods vehicles. Deliveries are scheduled to try to minimise the number of kilometres travelled.

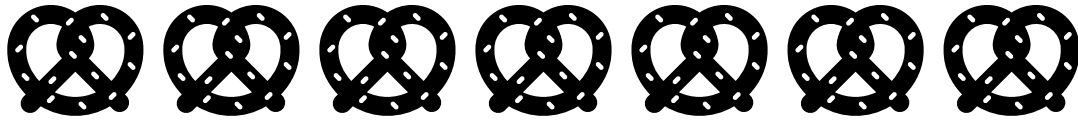
For the five large supermarket chains, some deliveries are made to their distribution depots, although the majority of deliveries are made direct to individual stores. For the local convenience store chains, deliveries are made to central depots. For independent grocery stores, deliveries are made direct to the store.

## Employees

Halfpenny had the following number of employees on 31 December 2024:

	Number
Production	827
Distribution	1,156
Head office	225
<b>Total</b>	<b>2,208</b>

## Article – What makes a winner? Industrial Bread Making now, and in the future



### TRADE BREAD

#### The trade magazine for the Keeland Bread Industry

What makes a winner? Industrial Bread Making now, and in the future

By: Layla Jones 14 May 2025

**I interviewed Trey Halfpenny after Halfpenny's white loaf was recently voted number 1 sliced loaf by customers. The first question I asked was what makes bread making such a distinct industry compared to others?**

Trey Halfpenny:

"Well, whilst the industrial bread making industry has its roots in traditional baking, there have been technological advances over the last 20 years which means that it now holds a distinctive place among global manufacturing sectors. I have always been interested in modernising production and adhering to quality control standards which we can see in other industries but there are several unique characteristics which set bread making apart.

**"So, Trey, can you tell me a little about those characteristics?"**

Trey Halfpenny:

"Well, the most prominent is that bread is perishable and has a relatively short shelf life. Therefore, we need to make sure our production and distribution are as fast as they can be. This is the same in industries such as dairy and other fresh produce, but not as much in say electronics for instance, which have significantly longer shelf lives. Techniques such as the Chorleywood Bread Process (CBP) and the addition of preservatives are employed to extend shelf life without compromising on quality."

Of course, there are also food safety standards which govern bread making to ensure consumer safety. There is also nutritional labelling to ensure transparency about ingredients, nutritional content and potential allergens, reflecting the high level of scrutiny over what consumers ingest."

**And of course, there are the production processes which have a particular priority at Halfpenny's.**

Trey Halfpenny:

"Yes, I must say developing our production processes is a particular focus of mine. There are some unique processes like high-speed mixing in CBP which distinguishes bread making from other food production



methods. Industrial bread making integrates specialised technology to optimise mixing, kneading, baking and packaging. Automation plays a significant role in ensuring consistency and efficiency.

**And what areas can you see affecting the bread industry in the future?**

Trey Halfpenny:

“Well, we rely heavily on agricultural products, making bread production susceptible to issues like crop failures and climate change. Sustainable sourcing of ingredients is becoming increasingly important. Environmental impact is, of course, a universal concern, but the nature of these impacts varies. We have concentrated our efforts on minimising food waste and optimising resource use with initiatives aimed at reducing packaging waste and improving supply chain efficiency.”

**And finally, how do you feel the bread industry will innovate and adapt compared to other industries?**

Trey Halfpenny:

“We are continuously innovating with new recipes, flavours and formulations to meet changing consumer preferences and dietary needs. For instance, the rise of health-conscious consumers has led to innovations in whole grain, low-carbohydrate and organic breads. This need for innovation is also the case in other industries like electronics and automotive, which often develop cutting-edge products and features. Adapting to market trends is crucial in all sectors.”

**Thank you so much Trey, it has been interesting finding out about the links between bread making and other industries.**

Trey Halfpenny:

“No thank you, I have really enjoyed talking to you”



## Financial statements for the year ended 31 December 2024

### Halfpenny

#### Statement of profit or loss for the year ended 31 December 2024

	2024 K\$000	2023 K\$000
Revenue	331,600	320,730
Cost of sales	(241,474)	(232,840)
<b>Gross profit</b>	<b>90,126</b>	<b>87,890</b>
Selling, distribution and marketing costs	(53,182)	(51,108)
Administrative expenses	(7,100)	(6,950)
<b>Operating profit</b>	<b>29,844</b>	<b>29,832</b>
Finance costs	(1,883)	(2,021)
<b>Profit before tax</b>	<b>27,961</b>	<b>27,811</b>
Income tax expense	(8,230)	(8,120)
<b>Profit for the year</b>	<b>19,731</b>	<b>19,691</b>

**Halfpenny****Statement of financial position at 31 December 2024**

	<b>2024 K\$000</b>	<b>2024 K\$000</b>	<b>2023 K\$000</b>	<b>2023 K\$000</b>
<b>ASSETS</b>				
<b>Non-current assets</b>				
Property, plant and equipment	101,569		94,276	
Right-of-use assets	11,192		12,620	
		112,761		106,896
<b>Current assets</b>				
Inventory	9,230		8,145	
Trade receivables	47,610		46,925	
Prepayments and other receivables	2,408		2,273	
Cash and cash equivalents	5,073		5,123	
		64,321		62,466
<b>Total assets</b>		<b>177,082</b>		<b>169,362</b>
<b>EQUITY AND LIABILITIES</b>				
Issued K\$1 equity share capital		10,000		10,000
Retained earnings		74,299		66,568
<b>Total equity</b>		<b>84,299</b>		<b>76,568</b>
<b>Non-current liabilities</b>				
Borrowings	15,540		15,540	
Lease liability	9,414		10,890	
		24,954		26,430
<b>Current liabilities</b>				
Trade payables	44,245		43,069	
Accruals and other payables	14,200		13,965	
Tax liability	8,230		8,120	
Lease liability	1,154		1,210	
		67,829		66,364
<b>Total equity and liabilities</b>		<b>177,082</b>		<b>169,362</b>

**Halfpenny****Statement of cash flows for the year ended 31 December 2024**

	<b>2024 K\$000</b>	<b>2024 K\$000</b>
<b>Cash flows from operating activities</b>		
Profit before tax		27,961
<b>Adjustments</b>		
Depreciation for property, plant and equipment	11,701	
Depreciation on right-of-use asset	1,428	
Profit on sale of property, plant and equipment	(109)	
Finance costs	1,883	
		14,903
<b>Movements in working capital</b>		
Increase in inventory	(1,085)	
Increase in trade and other receivables	(820)	
Increase in trade and other payables	1,411	
		(494)
<b>Cash generated from operations</b>		<b>42,370</b>
Tax paid		(8,120)
Interest paid		(1,883)
<b>Net cash inflow from operating activities</b>		<b>32,367</b>
<b>Cash flows from investing activities</b>		
Purchase of property, plant and equipment	(19,730)	
Proceeds from disposal of property, plant and equipment	845	
<b>Net cash outflow from investing activities</b>		<b>(18,885)</b>
<b>Cash flows from financing activities</b>		
Repayment of lease principal	(1,532)	
Dividend paid	(12,000)	
<b>Net cash outflow from financing activities</b>		<b>(13,532)</b>
<b>Net decrease in cash and cash equivalents</b>		<b>(50)</b>
Cash and cash equivalents at the start of the year		5,123
<b>Cash and cash equivalents at the end of the year</b>		<b>5,073</b>

## Budget information for the year ending 31 December 2025

### Total budgeted gross profit

	<b>Bread loaves K\$000</b>	<b>Bread rolls K\$000</b>	<b>Total K\$000</b>
Sales revenue	299,771	50,820	350,591
Cost of sales	(218,144)	(34,494)	(252,638)
<b>Gross profit</b>	<b>81,627</b>	<b>16,326</b>	<b>97,953</b>
<b>Gross profit margin</b>	<b>27.2%</b>	<b>32.1%</b>	<b>27.9%</b>

## Bread Loaves

### Sales revenue

	White	Wholemeal	Multi-seed	Rustic	Total
Sales volume	000	000	000	000	000
Large retailers	62,800	67,600	48,800	36,240	
Small retailers	15,700	16,900	12,200	9,060	
<b>Total</b>	<b>78,500</b>	<b>84,500</b>	<b>61,000</b>	<b>45,300</b>	<b>269,300</b>
Average sales price*	K\$	K\$	K\$	K\$	
Large retailers	0.88	0.88	1.20	1.52	
Small retailers	1.10	1.10	1.50	1.90	
Sales revenue	K\$000	K\$000	K\$000	K\$000	K\$000
Large retailers	55,264	59,488	58,560	55,085	
Small retailers	17,270	18,590	18,300	17,214	
<b>Total sales revenue</b>	<b>72,534</b>	<b>78,078</b>	<b>76,860</b>	<b>72,299</b>	<b>299,771</b>

\*average sales price is given per loaf

### Cost of sales

	White	Wholemeal	Multi-seed	Rustic	Total
	000	000	000	000	000
Total sales volume	78,500	84,500	61,000	45,300	269,300
Average production cost*	K\$	K\$	K\$	K\$	
Raw materials	1,256.25	1,398.75	1,473.75	1,651.25	
Direct labour	50.00	53.75	57.50	62.50	
Variable overhead	163.58	167.76	171.94	171.94	
Fixed overhead	373.10	384.13	395.15	395.16	
<b>Total cost per batch</b>	<b>1,842.93</b>	<b>2,004.39</b>	<b>2,098.34</b>	<b>2,280.85</b>	
	K\$000	K\$000	K\$000	K\$000	K\$000
<b>Total cost of sales</b>	<b>57,868</b>	<b>67,748</b>	<b>51,199</b>	<b>41,329</b>	<b>218,144</b>
Gross profit margin	20.2%	13.2%	33.4%	42.8%	27.2%

\*average production cost is given per batch of 2,500 loaves

## Bread Rolls

### Sales revenue

	White	Wholemeal	Multi-seed	Rustic	Total
Sales volume	000	000	000	000	000
Large retailers	21,360	15,440	12,480	4,800	
Small retailers	5,340	3,860	3,120	1,200	
<b>Total</b>	<b>26,700</b>	<b>19,300</b>	<b>15,600</b>	<b>6,000</b>	<b>67,600</b>
Average sales price*	K\$	K\$	K\$	K\$	
Large retailers	0.64	0.64	0.80	1.08	
Small retailers	0.80	0.80	1.00	1.35	
Sales revenue	K\$000	K\$000	K\$000	K\$000	K\$000
Large retailers	13,670	9,882	9,984	5,184	
Small retailers	4,272	3,088	3,120	1,620	
<b>Total sales revenue</b>	<b>17,942</b>	<b>12,970</b>	<b>13,104</b>	<b>6,804</b>	<b>50,820</b>

\*average sales price is given per packet of six rolls

### Cost of sales

	White	Wholemeal	Multi-seed	Rustic	Total
	000	000	000	000	000
Total sales volume	26,700	19,300	15,600	6,000	67,600
Average production cost*	K\$	K\$	K\$	K\$	
Raw materials	638.13	709.38	746.88	835.63	
Direct labour	48.75	52.75	56.75	60.75	
Variable overhead	154.87	159.05	163.23	167.41	
Fixed overhead	351.51	362.54	373.57	384.60	
<b>Total cost per unit</b>	<b>1,193.26</b>	<b>1,283.72</b>	<b>1,340.43</b>	<b>1,448.39</b>	
	K\$000	K\$000	K\$000	K\$000	K\$000
<b>Total cost of sales</b>	<b>12,744</b>	<b>9,910</b>	<b>8,364</b>	<b>3,476</b>	<b>34,494</b>
<b>Gross profit margin</b>	<b>29.0%</b>	<b>23.6%</b>	<b>36.2%</b>	<b>48.9%</b>	<b>32.1%</b>

\*average production cost is given per batch of 2,500 packets of rolls

### Example standard cost card

<b>Bread Loaves: Multi-seed</b>				
<b>Per batch of 2,500 loaves</b>	<b>Quantity / hours</b>	<b>Standard price / rate K\$</b>	<b>Standard cost K\$</b>	<b>Standard cost K\$</b>
<b>Raw materials:</b>				
Strong flour	1,375 kg	0.85	1,168.75	
Fast action yeast	10 kg	18.00	180.00	
Other			105.00	
Packaging			20.00	
<b>Total</b>				<b>1,473.75</b>
<b>Direct labour:</b>				
Mixing & Kneading	0.70 hours	25.00	17.50	
Shaping & Proving	0.85 hours	25.00	21.25	
Baking	0.25 hours	25.00	6.25	
Cooling	0.30 hours	25.00	7.50	
Packaging	0.20 hours	25.00	5.00	
<b>Total</b>				<b>57.50</b>
<b>Variable production overheads:</b>				
Mixing & Kneading	0.70 hours	38.33	26.83	
Shaping & Proving	0.90 hours	45.25	40.73	
Baking	0.50 hours	124.67	62.34	
Cooling	2.00 hours	14.30	28.60	
Packaging	0.50 hours	26.88	13.44	
<b>Total</b>				<b>171.94</b>
<b>Fixed production overheads:</b>				
Mixing & Kneading	0.70 hours	114.99	80.49	
Shaping & Proving	0.90 hours	105.58	95.02	
Baking	0.50 hours	187.00	93.50	
Cooling	2.00 hours	42.91	85.82	
Packaging	0.50 hours	80.64	40.32	
<b>Total</b>				<b>395.15</b>
<b>Total production cost</b>				<b>2,098.34</b>

### Notes on standards and budget preparation

1. Standards are reviewed and updated annually.
2. Normal raw material losses are included in the standard cost of each product.
3. All direct labour overtime premium is treated as variable production overhead. Idle time is not budgeted for.
4. Fixed and variable production overheads are allocated and apportioned to production cost centres and absorbed on a machine hours basis.
5. Budgets are prepared annually using an incremental approach. Managers have limited involvement in budget setting.



## Tax regime in Keeland

- The corporate income tax rate to be applied to taxable profits is 30%.
- Unless otherwise stated below, accounting rules on recognition and measurement are followed for tax purposes.
- The following expenses are not allowable for tax purposes:
  - accounting depreciation
  - amortisation
  - impairment charges
  - entertaining expenditure
  - donations to political parties
  - taxes paid to other public bodies.
- Tax depreciation allowances are available on all items of plant and equipment at a rate of 25% per year on a reducing balance basis. A full year's allowance is available in the year that the asset is acquired. Tax depreciation allowances are not available for property assets.
- Tax losses can be carried forward indefinitely to offset against future taxable profits from the same business.
- Sales tax is charged on all standard-rated goods and services at a rate of 20%. Tax paid on inputs into a business can be netted off against the tax charged on outputs from that business. All businesses are required to pay over the net amount due on a monthly basis.



## Operational Case Study Exam

Maximum Time Allowed: 3 Hours

Welcome, Candidate Name

If this is not your name, please let your administrator know.

Click **Next** to start the test.

This examination is structured as follows:

Section number	Time for section (minutes)	Number of tasks	Number of sub-task/s	% time to spend on each sub-task
1	45	1	3	(a) 48% (b) 28% (c) 24%
2	45	1	3	(a) 36% (b) 24% (c) 40%
3	45	1	2	(a) 52% (b) 48%
4	45	1	3	(a) 24% (b) 48% (c) 28%

Each section (task) has a number of sub-tasks. An indication of how much of the time available for the section that you should allocate to planning and writing your answer is shown against each sub-task in the text of the question (and summarised in the table above).

This information will be available for you to access during the examination by clicking on the Pre-seen button.

Reference Material

Pre-seen

Today is 1 June 2025. Halfpenny will start to sell direct to restaurants and coffee shops from 1 August. New distribution hubs are being set up and a fleet of delivery vehicles will be leased. These leased vehicles will be smaller than current delivery vehicles to allow for easy access to restaurants and coffee shops in city and town locations.

You receive the following email:

**From:** Evita Gomez, Finance Manager  
**To:** Finance Officer  
**Subject:** Delivery vehicles lease and choice of vehicle maintenance provider

The lease for the new delivery vehicles starts on 1 July 2025, which is when we will make the first lease payment of K\$150,000 and pay the arrangement fee of K\$14,000. There will be a further four annual lease payments of K\$150,000 on 1 July of each subsequent year. At the end of the 5-year lease term, we have the option to purchase the vehicles for K\$200,000. We expect to exercise this option and to use the vehicles for a total of 8 years, after which time we plan to sell them. The vehicles have a total useful life of 12 years and will be delivered to us on 1 July but will need to be taxed and registered before they can be used. We expect this to be completed at the end of July.

Please prepare a briefing paper for the SMT which explains:

- How the lease liability and right-of-use asset for this lease will be both initially and subsequently measured and recorded in our financial statements for the year ending 31 December 2025.
- (sub-task (a) = 48%)

We will be responsible for maintenance of the new delivery fleet and will be engaging the services of an external maintenance company. This company has offered a choice of three different 12-month contracts. Contract costs will be based on the number of call outs and the hours taken on each call out. I have used this information to prepare Table 1 (attached).

Please include in your briefing paper an explanation of:

- The information shown in Table 1, and which option should be chosen using a risk neutral approach to decision making.
- (sub-task (b) = 28%)
- Any limitations of using the information in Table 1 or a risk neutral approach to make this decision.
- (sub-task (c) = 24%)

Evita Gomez  
Finance Manager  
Halfpenny

The attachment to the email can be found by clicking on the Reference Material button above.

**Table 1: Comparison of options for delivery fleet maintenance contract**

Number of call outs	Maintenance hours per call out	Joint probability	Possible 12-month cost		
			Option 1 K\$	Option 2 K\$	Option 3 K\$
High	High	$0.3 \times 0.4 = 0.12$	186,000	195,000	225,000
High	Low	$0.3 \times 0.6 = 0.18$	123,000	172,500	112,500
Low	High	$0.7 \times 0.4 = 0.28$	93,000	97,500	112,500
Low	Low	$0.7 \times 0.6 = 0.42$	61,500	86,250	56,250
<b>Expected value</b>			<b>96,330</b>	<b>117,975</b>	<b>102,375</b>















**Note:**

- The number of call outs, maintenance hours per call out and probabilities have been estimated by Lottie Phipps, Finance Director.

Reference Material










Pre-seen

Write the briefing paper requested by Evita Gomez in the box below.



Paragraph ▾

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Reference Material

Pre-seen

A week later, Evita Gomez, Finance Manager, calls you and says:

"I have prepared a draft budget for the new direct business to restaurants and coffee shops for the period August to December 2025. There is some uncertainty about selling prices across our product range and the final level of fixed costs because we are still negotiating with customers and some of the service providers for the new distribution hubs. There is also uncertainty over the volume of sales we can expect. Lottie Phipps, Finance Director, has requested that a what-if analysis is performed on the draft budget and presented to the Senior Management Team (SMT). I have produced the what-if analysis (Table 1), which I will send you shortly.

Please prepare a briefing paper for the SMT which explains:

- The figures in the what-if analysis in Table 1, and what they indicate about the impact on the current draft budgeted profit of changes in sales volume, average selling price and fixed costs.

**(sub-task (a) = 36%)**

- Any limitations of the what-if analysis in Table 1.

**(sub-task (b) = 24%)**

As a result of the new direct business to restaurants and coffee shops, we have been increasing our production capacity. This includes installing new equipment and employing additional workers and supervisors. As you know, we currently set our production standards and budgets annually. However, given the uncertainty surrounding the new direct business and new product launches that are in the pipeline for the next 12 months, it has been suggested that we adopt a rolling budgets approach.

Please include in your briefing paper an explanation of:

- How a rolling budgets approach would work and the potential benefits and drawbacks of adopting a rolling budgets approach for our production budgets."

**(sub-task (c) = 40%)**

Reference Material

Pre-seen

A week later, Evita Gomez, Finance Manager, calls you and says:

"I have prepared a draft budget for the new direct business to restaurants and coffee shops for the period August to December 2025. There is some uncertainty about selling prices across our product range and the final level of fixed costs because we are still negotiating with customers and some of the service providers for the new distribution hubs. There is also uncertainty over the volume of sales we can expect. Lottie Phipps, Finance Director, has requested that a what-if analysis is performed on the draft budget and presented to the Senior Management Team (SMT). I have produced the what-if analysis (Table 1), which I will send you shortly.

Please prepare a briefing paper for the SMT which explains:

- The figures in the what-if analysis in Table 1, and what they indicate about the impact on the current draft budgeted profit of changes in sales volume, average selling price and fixed costs.

**(sub-task (a) = 36%)**

- Any limitations of the what-if analysis in Table 1.

**(sub-task (b) = 24%)**

As a result of the new direct business to restaurants and coffee shops, we have been increasing our production capacity. This includes installing new equipment and employing additional workers and supervisors. As you know, we currently set our production standards and budgets annually. However, given the uncertainty surrounding the new direct business and new product launches that are in the pipeline for the next 12 months, it has been suggested that we adopt a rolling budgets approach.

Please include in your briefing paper an explanation of:

- How a rolling budgets approach would work and the potential benefits and drawbacks of adopting a rolling budgets approach for our production budgets."

**(sub-task (c) = 40%)**

Evita Gomez sends you Table 1, which can be found by clicking on the Reference Material button above.



**Table 1: What-if analysis on the draft direct business budget for the period August to December 2025**










Average selling price	Fixed costs	Profit at different sales volume		
		7,500,000	9,000,000	10,500,000
K\$	K\$000	K\$000	K\$000	K\$000
1.20	3,750	1,500	2,550	3,600
	4,100	1,150	2,200	3,250
	4,500	750	1,800	2,850
1.05	3,750	375	1,200	2,025
	4,100	25	850	1,675
	4,500	(375)	450	1,275
0.95	3,750	(375)	300	975
	4,100	(725)	(50)	625
	4,500	(1,125)	(450)	225









**Notes:**

- Average selling price is based on budgeted mix.
- Average variable cost per unit is budgeted to be K\$0.50, based on budgeted mix.
- The current draft budgeted profit for the period is K\$850,000.

 Reference Material Pre-seen

Write the briefing paper requested by Evita Gomez in the box below.

       **B** *I* U   $x_2$   $x^2$  

Paragraph        

Reference Material

Pre-seen

It is now early July 2025 and you receive the following email:

**From:** Evita Gomez, Finance Manager  
**To:** Finance Officer  
**Subject:** Cost drivers and receivables management

The new distribution hubs for direct business to restaurants and coffee shops will soon be operational. These are located in different parts of the country to cover different geographical areas. Paul George, the newly-appointed Direct Manager, has mapped out the activities of a hub (included in Schedule 1 attached).

We have already produced an initial budget for the costs of operating the new hubs based on our experience in the main Distribution Centre. However, given that Paul has mapped out the activities, it has been suggested that we use this to try and understand more about distribution hub costs. Lottie Phipps, Finance Director, has suggested that we consider using cost drivers.

Please prepare a briefing paper for the Senior Management Team (SMT) which:

- Identifies costs and justifies cost drivers for each of the activities in Schedule 1 and explains how these cost drivers could be used to help control the cost of these activities.

**(sub-task (a) = 52%)**

We have already signed up 30 new direct customers and are in negotiations with many more. These are a mixture of national chains of restaurants and coffee shops and small independent businesses. I would like Kia Prinz, Finance Apprentice, to be involved in receivables management and need you to help them.

Please prepare a briefing paper for Kia which explains:

- The factors to consider when agreeing initial credit terms with direct customers and the actions we will need to take to manage the receivables balances of these customers after we start trading with them.

**(sub-task (b) = 48%)**

Evita Gomez  
Finance Manager  
Halfpenny

The attachment to the email can be found by clicking on the Reference Material button above.















**Schedule 1: Direct distribution hub and delivery activities**

Activity	Detail about the activities
Receiving	Throughout the day, deliveries of finished products will be received from the Production Facility by truck. Each truck will contain full or partially full pallets, with each pallet containing a single product. An individual pallet will be unloaded from the truck by forklift and taken to the appropriate storage bay for that product.
Picking	Orders from customers will be for an individual restaurant or coffee shop for that customer and will be relatively small. Orders come through on an electronic tablet and an individual order will be picked by a picking employee into a single wheeled cage. The picking employee will move the cage around the storage bays on foot, picking the relevant products for that order. The picking employee will scan the QR code of the pallet from which the products are taken to check shelf-life. After the order has been picked, the cages will then be wheeled, by hand, into the appropriate delivery truck for that delivery area.
Delivery	Each delivery truck will operate within a specific area of the region where the distribution hub is located. After the delivery truck is loaded, the route is plotted by computer, although delivery drivers have the authority to overwrite this. At the restaurant or coffee shop, the delivery driver will unload the relevant cage from the truck and wheel this into the premises. The full cage will be left at the premises and any empty cages from previous deliveries returned by the driver to the delivery truck. The driver will then drive to the next drop off point, returning to the distribution hub when all deliveries have been made.

Reference Material










Pre-seen

Write the briefing papers requested by Evita Gomez in the box below.



Paragraph ▾

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Reference Material

Pre-seen

It is now September 2025. Evita Gomez, Finance Manager, calls you and says:

"The new direct delivery fleet has been in operation for a month now. Schedule 1 (which I will give you shortly) includes notes on the activities of the direct delivery drivers and variances related to delivery drivers.

Please prepare a briefing paper for the Senior Management Team (SMT) which explains:

- What each of the variances in Schedule 1 means and likely reasons for their occurrence.

**(sub-task (a) = 24%)**

For future months, it has been suggested that we also monitor performance of the direct delivery drivers using key performance indicators (KPIs).

Please include in your briefing paper:

- Suggestions of three KPIs that would be relevant to monitor the performance of an individual delivery driver. For each KPI, please explain how it would be measured, why it would be appropriate and factors to consider when reviewing performance against target.

**(sub-task (b) = 48%)**

On a slightly different note, Paul George, Direct Manager, recently informed me that we have been offered a significant one-off contract to supply bread rolls to a caterer at a major music festival. The caterer has been let down by its original supplier and the music festival is next week. The caterer has offered a low price for the contract and we need to decide whether to accept it. Lottie Phipps, Finance Director, has requested that we calculate the relevant cost of the contract to help with this decision. Table 1 (which I will give you shortly) includes the initial estimate of the contract cost.

Please include in your briefing paper an explanation of:

- For each of the costs in Table 1, whether they will be relevant or irrelevant for the purposes of determining whether to accept the one-off contract."

**(sub-task (c) = 28%)**

Evita sends you Schedule 1 and Table 1, which can be found by clicking on the Reference Material button above.

Schedule 1 Table 1

**Schedule 1: Information about the direct delivery fleet**

**Delivery driver activities**

- Each delivery driver operates within a specific area within the geographical region that the direct distribution hub is located.
- The driver arrives at their distribution hub to collect an already loaded delivery vehicle along with the computer planned route. The driver has the authority to change the route.
- At each delivery, the driver will unload the relevant cage from the truck and wheel this into the premises. The full cage will be left at the premises and any empty cages returned to the delivery truck.

**Labour variances for direct delivery fleet drivers for August 2025**

Variance	K\$
Rate	11,000 A
Idle time	2,500 A
Efficiency	5,625 F

**Notes:**

- The above variances are based on standard hours per km travelled. Idle time is not budgeted for.
- During August:
  - The number of deliveries was higher than budget.
  - The actual km travelled was 82,000.
  - Agency drivers were engaged at the start of the month, as we were slow to recruit our own drivers.
  - Some drivers had to wait for vehicles to be loaded prior to leaving their distribution hub.

## Schedule 1 Table 1

**Table 1: Costs of the one-off contract for the music festival**















Cost	Note
Total production cost of bread rolls	The bread rolls supplied will be our regular White, Wholemeal and Multi-seed rolls and will not require any specialised raw materials. Overtime will need to be worked to accommodate the extra production required for this contract.
Administration cost	Five hours of management time has already been taken negotiating with the caterer and a further 5 hours of management time will be required if we accept the contract.
Delivery cost	The bread rolls will be delivered to the music festival using our own delivery vehicles and drivers. As our delivery fleet is working at full capacity, we will need to hire additional vans and agency drivers to ensure that other deliveries can be made on time.



Reference Material












Pre-seen

Write the briefing paper requested by Evita Gomez in the box below.



Paragraph ▾

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Thank you for completing the Operational Case Study Exam.

Before you leave, don't forget to collect your printed confirmation of attendance.

Please click the End Exam (E) button before leaving the testing room quietly.





## Operational Case Study Exam

Maximum Time Allowed: 3 Hours

Welcome, Candidate Name

If this is not your name, please let your administrator know.

Click **Next** to start the test.

This examination is structured as follows:

Section number	Time for section (minutes)	Number of tasks	Number of sub-task/s	% time to spend on each sub-task
1	45	1	3	(a) 36% (b) 32% (c) 32%
2	45	1	3	(a) 32% (b) 36% (c) 32%
3	45	1	3	(a) 32% (b) 32% (c) 36%
4	45	1	3	(a) 40% (b) 36% (c) 24%

Each section (task) has a number of sub-tasks. An indication of how much of the time available for the section that you should allocate to planning and writing your answer is shown against each sub-task in the text of the question (and summarised in the table above).

This information will be available for you to access during the examination by clicking on the Pre-seen button.

Reference Material

Pre-seen

Today is 1 June 2025. The Product Development Team at Halfpenny has been working on a range of gluten-free products. This range includes loaves, rolls, pittas and wraps and will be called GF@Halfpenny. Early market research indicates that there is considerable interest in this range. A decision will soon be made whether production is outsourced or a new gluten-free production facility is set up.

You receive the following email:

**From:** Evita Gomez, Finance Manager  
**To:** Finance Officer  
**Subject:** GF@Halfpenny sales forecast and short-term investment

We need to establish an initial sales forecast for GF@Halfpenny. As a starting point, I've used some data about total sales volume of gluten-free bread products in Keeland from January 2021 until the end of 2024 and calculated 4-point moving averages. I have plotted the sales data and these averages on Chart 1 (attached).

Please prepare a briefing paper for the Senior Management Team (SMT) which explains:

- What Chart 1 shows us about sales of gluten-free bread products in Keeland and how to determine a trend line and seasonal variations based on all of the data used in Chart 1.

**(sub-task (a) = 36%)**

- The validity of a forecast of sales volume for the new GF@Halfpenny range based on this trend line and these seasonal variations.

**(sub-task (b) = 32%)**

If the SMT decide to produce GF@Halfpenny in-house, we will need to purchase a property to set up our own gluten-free bakery. If this goes ahead, it is likely to happen in 2 months' time. We currently have the funds available to make this purchase, although the SMT is keen that these funds are now invested short term rather than left in the bank current account.

Please include in your briefing paper an explanation of:

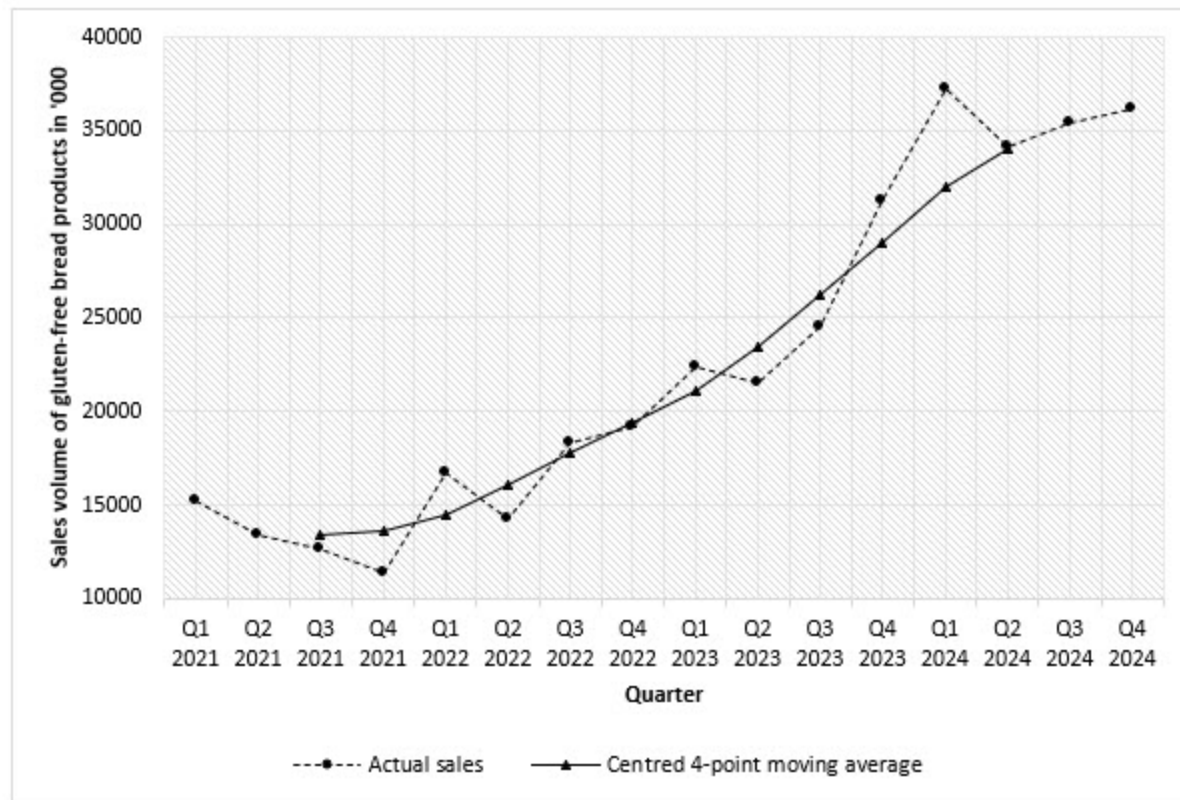
- The factors to be considered when choosing how to invest these funds short term, with reference to possible types of investment.

**(sub-task (c) = 32%)**

Evita Gomez  
Finance Manager  
Halfpenny

The attachment to the email can be found by clicking on the Reference Material button above.





















**Chart 1: Actual sales volume of gluten-free bread products in Keeland and centred 4-point moving averages****Notes:**

- Q1 is the period January to March each year.
- In Q3 2022, a well-known celebrity in Keeland, who has an intolerance to gluten, endorsed a range of gluten-free products that was stocked for the first time at Pico supermarkets.
- In Q4 2023, FBH (a competitor large plant bakery) launched its own range of gluten-free products.

 Reference Material Pre-seen

Write the briefing paper requested by Evita Gomez in the box below.

       **B** *I* U   $x_2$   $x^2$  

Paragraph ▾  ▾        

Reference Material

Pre-seen

It is 2 weeks later. The Senior Management Team (SMT) is still considering whether production of GF@Halfpenny will be outsourced or a new gluten-free production facility set up.

You receive the following email:

**From:** Evita Gomez, Finance Manager  
**To:** Finance Officer  
**Subject:** GF@Halfpenny profit/volume chart and outsourcing

The SMT is considering the following three options for production of the new GF@Halfpenny range:

1. Produce all products in-house.
2. Produce loaves and rolls in-house and outsource production of pittas and wraps (because pittas and wraps require specialist equipment and a different production and baking technique).
3. Outsource production of all products.

To help with the decision, the SMT has asked for an analysis of the break-even position for each of the above options based on our initial estimates of sales volume, sales mix, sales price, variable cost per unit and total fixed costs for the first 6 months of operation. I have therefore prepared a profit/volume chart (Chart 1 attached).

Please prepare a report for the Senior Management Team (SMT) which explains:

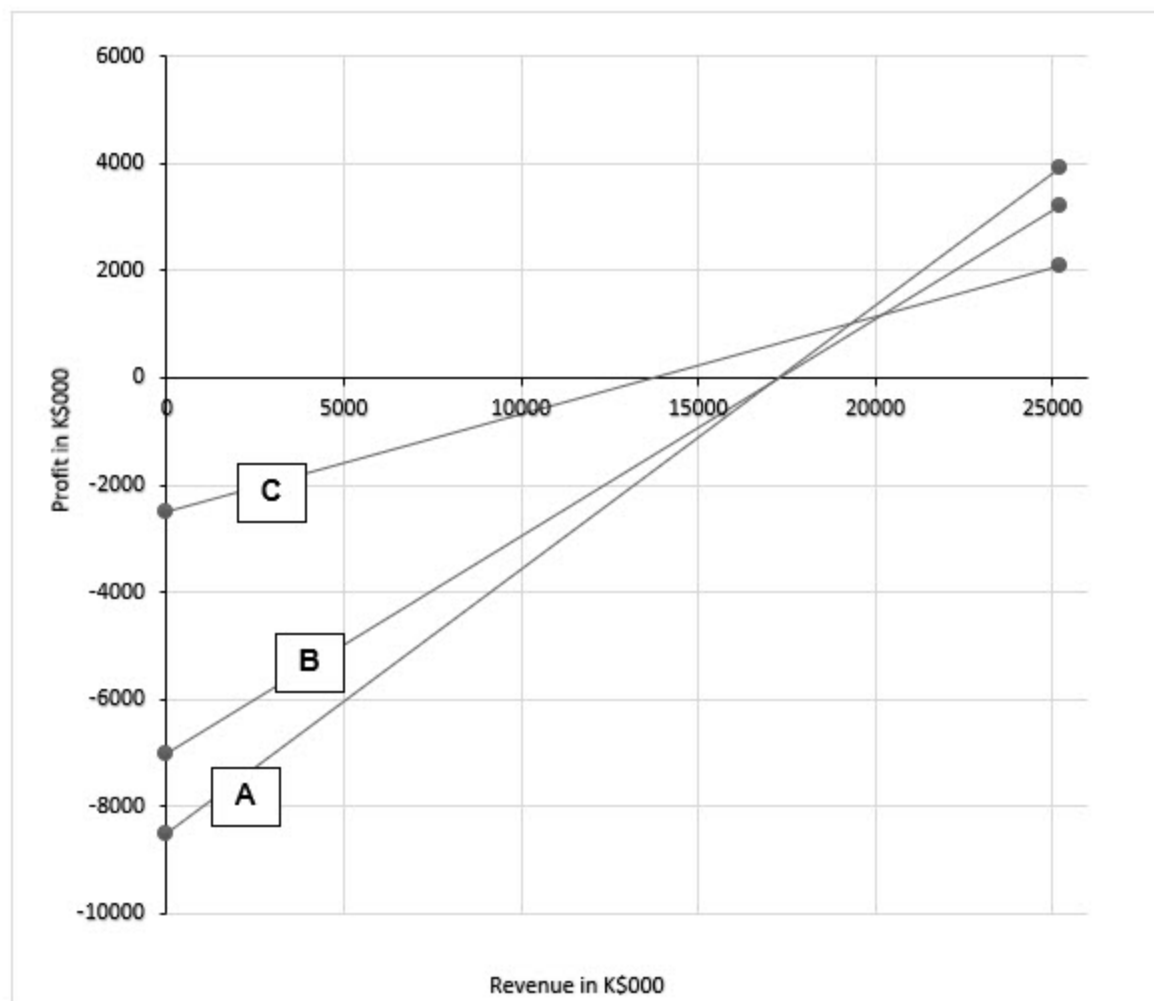
- Chart 1 and what it tells us about fixed costs, budgeted profit, variable cost per unit and break-even position for the above options.  
(sub-task (a) = 32%)
- The benefits and limitations of this break-even analysis.  
(sub-task (b) = 36%)
- The other factors to be considered when deciding whether to outsource some or all production of the GF@Halfpenny range.  
(sub-task (c) = 32%)

Evita Gomez  
Finance Manager  
Halfpenny

The attachment to the email can be found by clicking on the Reference Material button above.



**Chart 1: Multi-product profit/volume chart for GF@Halfpenny for the first 6 months**

















**Notes:**

- Line A represents all production in-house, Line B represents outsourcing pittas and wraps and Line C represents outsourcing all production.
- The budgeted volume, mix and selling prices of GF@Halfpenny loaves, rolls, pittas and wraps are assumed to be the same for lines A, B and C.
- Fixed costs include production overheads (where appropriate) and selling and marketing costs, all specific to the GF@Halfpenny range.

Reference Material










Pre-seen

Write the report requested by Evita Gomez in the box below.



Paragraph ▾

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Reference Material

Pre-seen

It is now August 2025. The Senior Management Team (SMT) decided to produce all products in-house. The GF@Halfpenny range is to be endorsed by Jo Fox, an expert in gluten-free living. The SMT is working with Jo and an app development company to create a GF@Halfpenny subscription app.

Evita Gomez, Finance Manager, calls you and says:

"I've just been in an SMT meeting where we were discussing the new app. The idea is that it will be available to download free of charge from three app provision platforms, which will each charge us an annual fee of K\$20,000 for providing the app. To use the app though, customers will need to subscribe to it, committing themselves to a minimum monthly spend on GF@Halfpenny, which will be payable at the start of each month. Subscribers will also have access to gluten-free recipes and advice for living with gluten intolerance.

We will pay K\$845,000 to the app developer and K\$128,000 to Jo Fox for development of the app. We will also pay Jo a royalty of K\$0.50 for each paying subscriber to the app. We will upgrade our servers to host the app and will recruit additional IT employees to administer the app. As the need arises, the app developer will provide upgrades and bug fixes for additional fees.

Please prepare a briefing paper for the SMT which explains:

- The nature and cost behaviour of each type of future cost associated with the app.

(sub-task (a) = 32%)

- How to establish a cost per subscriber to the app and the difficulties associated with doing this.

(sub-task (b) = 32%)

A couple of weeks ago, we purchased a property which is now in the process of being turned into our new Gluten-Free Production Facility. Details of the expenditure that we have incurred and are yet to incur in relation to the property are included in Table 1, which I will send you shortly.

Please include in your briefing paper an explanation, with appropriate justification, of:

- How the property related expenditure in Table 1 will be recognised and then initially and subsequently measured in our financial statements for the year ending 31 December 2025."

(sub-task (c) = 36%)

Evita sends you Table 1, which can be found by clicking on the Reference Material button above.

**Table 1: Expenditure on new property**

Expenditure item	K\$
Purchase of property (land and buildings) on 1 August 2025	1,250,000
Property tax paid on purchase	125,000
Legal fees paid on property purchase	32,000
Building contractor costs payable on 15 September 2025 on completion of building works	78,400
Building inspection fee payable on 30 September 2025 on receipt of inspection certificate	5,600















**Notes:**

- The building has been assessed by surveyors to have a useful life of 50 years. We anticipate that we will need to relocate in 20 years' time.
- The building inspection is a legal requirement and the facility cannot be equipped until the inspection certification has been obtained.

Reference Material










Pre-seen

Write the briefing paper requested by Evita Gomez in the box below.



Paragraph ▾

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📖 Reference Material

📖 Pre-seen

It is now February 2026. GF@Halfpenny was launched to the market in December 2025 and consumers are able to buy the range through two sales channels: from retailers (large and small) and through the subscription app.

You receive the following email:

**From:** Evita Gomez, Finance Manager  
**To:** Finance Officer  
**Subject:** Sales variances, KPIs and financial statements

The Senior Management Team (SMT) has asked for a review of the sales performance in January 2026 for GF@Halfpenny across our two sales channels. Lottie Phipps, Finance Director, has suggested that we focus on the highest volume product in the range, the White Loaf. The relevant sales variances are included in Table 1 (attached).

Please prepare a briefing paper to the SMT which explains:

- What the variances in Table 1 mean, possible reasons for their occurrence and what the variances indicate about overall sales performance of the GF@Halfpenny White Loaf in the period.

(sub-task (a) = 40%)

The GF@Halfpenny subscription app has been operational now for 2 months and has proved more popular than we initially anticipated. Subscribers commit to a monthly spend of K\$20, payable at the start of the month, and are then able to order items through the app. Subscribers are free to order more than K\$20 worth of items in the month and pay for any excess when the order is placed. Subscribers are free to end their subscription at any time or from the start of January can commit to a 6-month subscription to receive a discount on the price of all items purchased. Lottie would like to start monitoring usage of the app with key performance indicators (KPIs).

Please include in your briefing paper suggestions of:

- Three KPIs that can be used to monitor the usage of the subscription app. Please explain how each KPI would be measured and why it would be appropriate.

(sub-task (b) = 36%)

I have started working on the financial statements for the year ended 31 December 2025. There are two issues (detailed in Table 2 attached) that might affect these financial statements.

Please include in your briefing paper an explanation of:

- How the issues detailed in Table 2 will affect the financial statements for the year ended 31 December 2025.

(sub-task (c) = 24%)

Evita Gomez  
Finance Manager  
Halfpenny

The attachments to the email can be found by clicking on the Reference Material button above.

**Table 1: Sales variances for GF@Halfpenny White Loaves for January 2026**

Variance	Retailers K\$	App subscribers K\$	Total K\$
Sales price	45,136 F	104,160 A	59,024 A
Sales mix profit	10,416 F	41,664 F	52,080 F
Sales quantity profit			90,160 F

**Notes:**

- Budgeted selling prices are after planned discounts. Sales managers have the authority to negotiate discounts with retailers. For January, Rosa Gimble, Sales & Marketing Director, authorised an unplanned discount for app subscribers if they committed to the app for a full 6-month period.
- The sales mix and quantity profit variances are calculated using the weighted average method and standard gross profit. Standard gross profits are:

	Retailers K\$	App subscribers K\$	Weighted average K\$
Standard gross profit per loaf	0.88	1.40	0.98










**Table 2: Issues potentially affecting the financial statements for the year ended 31 December 2025**











Issue	Detail
1	On 16 January 2026, we were notified that a supplier of gluten-free flour is taking us to court for breaking a contract. We had cancelled the contract on 20 December 2025 because we weren't happy with the quality of the flour. Our lawyers have advised us that it is probable that, given the terms of the contract, we will need to pay compensation of K\$22,000.
2	On 3 January 2026, we sold some items of GF@Halfpenny for animal feed because they had a sell by date of 30 December 2025. The items were sold for a total of K\$1,000 and we incurred K\$320 of transportation costs. The items are included in the closing inventory value at their total cost of K\$12,300.



 Reference Material Pre-seen

Write the briefing paper requested by Evita Gomez in the box below.

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Paragraph          



Thank you for completing the Operational Case Study Exam.

Before you leave, don't forget to collect your printed confirmation of attendance.

Please click the End Exam (E) button before leaving the testing room quietly.



## Operational Case Study Exam

Maximum Time Allowed: 3 Hours

Welcome, Candidate Name

If this is not your name, please let your administrator know.

Click **Next** to start the test.



This examination is structured as follows:

Section number	Time for section (minutes)	Number of tasks	Number of sub-task/s	% time to spend on each sub-task
1	45	1	2	(a) 44% (b) 56%
2	45	1	3	(a) 32% (b) 36% (c) 32%
3	45	1	2	(a) 40% (b) 60%
4	45	1	3	(a) 40% (b) 32% (c) 28%

Each section (task) has a number of sub-tasks. An indication of how much of the time available for the section that you should allocate to planning and writing your answer is shown against each sub-task in the text of the question (and summarised in the table above).

This information will be available for you to access during the examination by clicking on the Pre-seen button.

Reference Material

Pre-seen

Today is 1 June 2025. Halfpenny is negotiating a contract with Gourmetopia, an existing customer. The contract is to produce an agreed volume of Gourmetopia's own brand bread for a period of 6 months. Gourmetopia may change the volume of bread ordered and will not accept partial fulfilment of the contract at any time.

Evita Gomez, Finance Manager, calls you into her office and says:

"The Senior Management Team (SMT) is meeting tomorrow to further discuss the offer made by Gourmetopia. During negotiations, it has become clear that during the contract period there may be changes to the selling price, cost of flour and sales volume. The SMT would like to understand the impact of adverse changes to these variables. I have produced Table 1, which I will give you shortly. It shows the impact on the contract's budgeted contribution and profit of independent adverse changes to the variables of 10%.

Please prepare a briefing note for me which:

- Using the information in Table 1, explains the differing impacts on the budgeted contribution and profit of the 10% independent adverse changes to selling price, cost of flour and sales volume.

**(sub-task (a) = 44%)**

Earlier today, I was discussing production issues with Jack Hobbs, Production Director, and he alerted me to a potential problem with accepting the Gourmetopia contract. A planned refurbishment of part of the Production Facility would limit the amount of mixing hours and shaping hours that would be available to produce Rustic loaves and the bread for Gourmetopia, which will not accept partial fulfilment of orders at any time. He said that it might be possible to increase the available hours for one of those two processes but not for both.

I have produced Graph 1, which I will give you shortly, to illustrate to the SMT the impact of constraints on the production of Rustic loaves and the Gourmetopia bread (ignoring the possibility of any changes to the variables previously mentioned). I have deliberately not shown any numbers on the graph, as I want the SMT to focus on the issues resulting from the possible combinations of output. I would like you to produce briefing notes to explain the situation the graph shows at points A, B, C, D and E.

Please also include in your briefing note an explanation of:

- The situation represented by each of the five points, A to E, shown on Graph 1 and the factors we need to consider in relation to output, resources and profits at those points."

**(sub-task (b) = 56%)**

Evita then sends you Table 1 and Graph 1, which can be found by clicking on the Reference Material button above.

## Table 1

## Graph 1

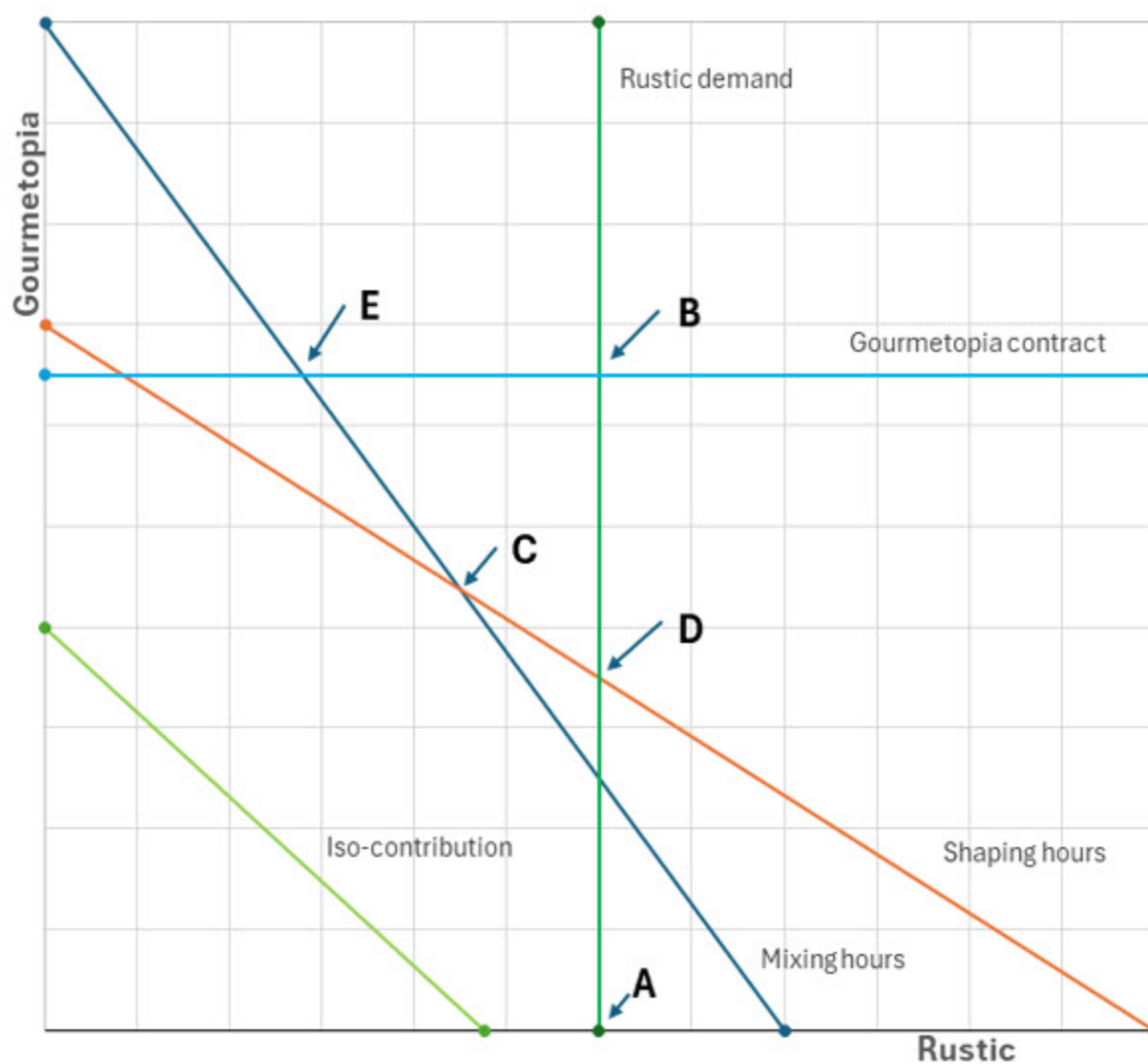
**Table 1: Impact of changes to the variables**

	<b>10% adverse change to selling price</b>	<b>10% adverse change to cost of flour</b>	<b>10% adverse change to sales volume</b>
Budgeted contribution	-22%	-8%	-10%
Budgeted profit	-30%	-11%	-9%



Table 1 Graph 1

**Graph 1: Rustic and Gourmetopia production and constraints**












**Note:**










- The horizontal and vertical axes show the output of batches of Rustic loaves and batches of bread for the Gourmetopia contract, respectively.



 Reference Material Pre-seen

Write the briefing note requested by Evita Gomez in the box below.

       **B** *I* U   $x_2$   $x^2$  

Paragraph ▾  ▾        

Reference Material

Pre-seen

It is now 3 June 2025. The Senior Management Team (SMT) is continuing to consider the Gourmetopia contract. This has raised awareness of the need to more closely monitor production and the cost of holding working capital.

Evita Gomez, Finance Manager, calls you into her office and says:

"I presented our analysis of the Gourmetopia contract at the SMT meeting yesterday. Discussions about the Gourmetopia contract in the meeting highlighted how vulnerable, in general, our profits are to price rises for flour.

Jack Hobbs, Production Director, suggested big data and artificial intelligence may benefit our planning and control within the budgeting process. The SMT thought this was a good idea and would like a briefing note which considers this suggestion. They have also asked me to include in the briefing note suggestions for KPIs that we could use to monitor production costs and volumes.

Please prepare a briefing note which:

- Explains how planning and control of flour costs within the budgeting process can be improved by using big data and artificial intelligence.  
**(sub-task (a) = 32%)**
- Suggests three KPIs for monitoring production cost and volumes. Explain how each of these would be calculated and why they would be appropriate.  
**(sub-task (b) = 36%)**

Lottie Phipps, Finance Director, also raised the potential for us to cut our costs of holding working capital to help maintain profit. She suggested that we could move from our current conservative working capital policy to a more aggressive working capital policy. The SMT wants to understand more about the possible implications of this. I have produced a summary of our working capital as at 31 May 2025, included in Table 1, which I will give you shortly.


Please also include in your briefing note:

- Using Table 1, an explanation of what moving to a more aggressive working capital policy will mean for us."  
**(sub-task (c) = 32%).**










Evita then sends you Table 1, which can be found by clicking on the Reference Material button above.











**Table 1: Summary of working capital as at 30 May 2025**

Area	Commentary
Inventory	<ul style="list-style-type: none"><li>• Flour<ul style="list-style-type: none"><li>◦ We have 10 full flour silos on site but only use an average of six silos per day.</li><li>◦ Flour deliveries are received daily. There is a 2-day lead time between a flour order being made and the flour being delivered.</li></ul></li><li>• Finished Goods<ul style="list-style-type: none"><li>◦ Are dispatched to customers daily.</li></ul></li></ul>
Accounts receivable	<ul style="list-style-type: none"><li>• Our average customer credit limit is K\$50,000, compared to an industry average of K\$48,000.</li><li>• 80% of our customers use 100% of their credit limits.</li><li>• Industry-average credit terms are 60 days. Our payment terms range from 40 to 60 days for large firms and 20 to 40 days for small firms.</li><li>• 40% of our customers pay in 50 days or less, with the remaining customers taking between 50 and 65 days.</li></ul>
Accounts payable	<ul style="list-style-type: none"><li>• Our supplier's average credit terms are 25 days, compared to an industry average of 20 days.</li><li>• We don't currently take the maximum days available for all suppliers' payments.</li></ul>
Overdraft	<ul style="list-style-type: none"><li>• Keeland Bank requires us to reapply for our overdraft facility every 6 months.</li><li>• Our authorised overdraft interest rate is 7.8% and our unauthorised overdraft interest rate is 23.5%.</li><li>• We have a positive bank balance for an average of 16 days each month. We use up to 80% of our authorised overdraft facility for the remaining days of the month.</li></ul>

 Reference Material Pre-seen

Write the briefing note requested by Evita Gomez in the box below.

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Paragraph          



Reference Material

Pre-seen

It is now 1 October 2025. The Senior Management Team (SMT) accepted the Gourmetopia contract and production has been running for 2 months. In Keeland, the price of raw materials and electricity are rising and the Bank of Keeland is looking to raise interest rates to curb inflation. To retain customers, in several contract renegotiations over the last month, Halfpenny has had to reduce its selling prices.

You receive the following email:

**From:** Evita Gomez, Finance Manager  
**To:** Finance Officer  
**Subject:** Fixed overhead variances and rising costs

I have calculated the latest fixed overhead variances for the Baking Department for the 4 weeks to 30 September (Schedule 1 attached). I don't have time to prepare the commentary for these for the SMT meeting tomorrow.

Please prepare a briefing note which explains:

- What the variances in Schedule 1 mean, possible reasons for their occurrence and what they indicate about production performance in the Baking Department.

**(sub-task (a) = 40%)**

The SMT remains concerned about diminishing profits caused by having to reduce selling prices to retain customers, whilst facing the rising costs of raw materials and electricity. Lottie Phipps, Finance Director, believes cost control is the key to remaining profitable. She has given me an infographic of the CGMA cost transformation model (Graphic 1, attached). She wants to give a presentation to the SMT about how the CGMA cost transformation model could be applied in our business as a framework to reduce costs.

Please also include in your briefing note an explanation of:

- How the CGMA cost transformation model in Graphic 1 could be applied in our business as a framework to maintain our profitability.

**(sub-task (b) = 60%)**

Evita Gomez  
Finance Manager  
Halfpenny

The attachments to the email can be found by clicking on the Reference Material button above.

## Schedule 1 Graphic 1

**Schedule 1: Baking Department fixed production overhead variances for the 4 weeks to 30 September 2025**

Fixed production overhead variance	K\$
Expenditure	130,769 adv
Capacity	77,964 fav
Efficiency	56,099 adv

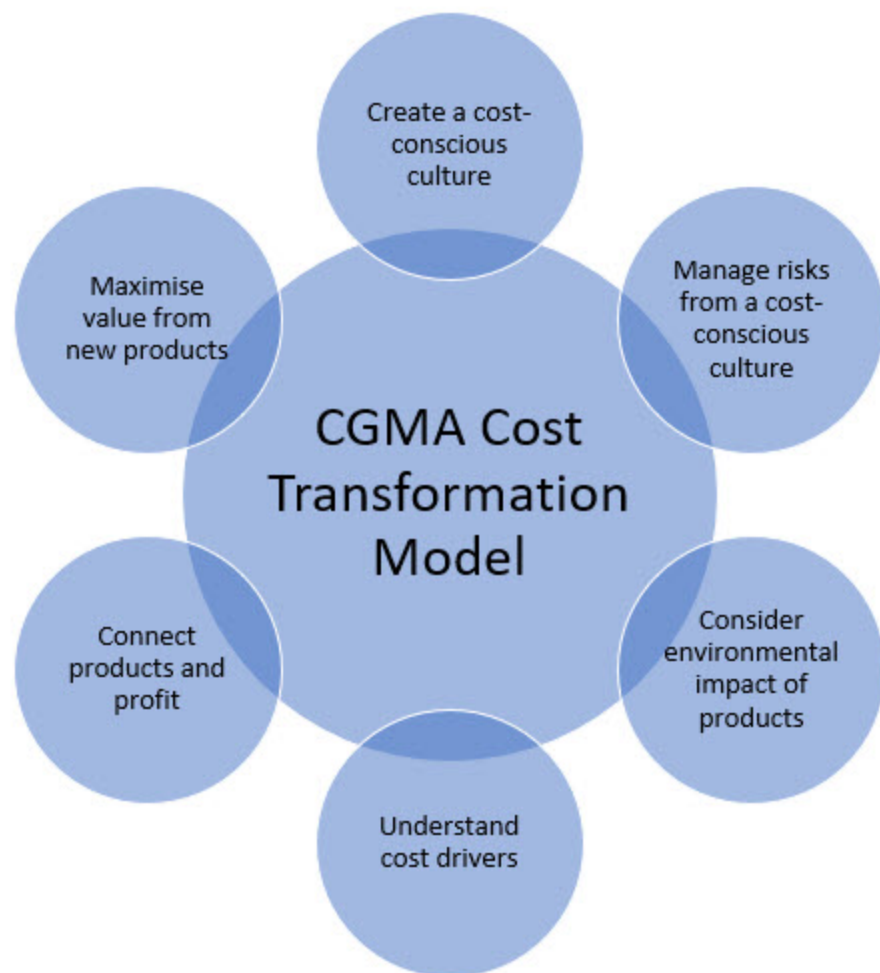
**Notes:**

- The fixed production overhead variances are based on the original budgeted figures for the Baking Department for 2025 and the resultant fixed production overhead rate of K\$187.00 per machine hour. The budget was based on running at 90% of capacity.
- We recruited extra factory workers and supervisors to enable production of the increased volumes.
- An additional maintenance check of the ovens was completed in September.
- Gourmetopia bread production was not included in the budget for the period which was produced at the start of the current financial year.
- Gourmetopia bread takes 5% less time than Halfpenny bread to bake.












Schedule 1 Graphic 1










Graphic 1: Six areas for change for organisations looking to improve their costs structures



 Reference Material Pre-seen

Write the briefing note requested by Evita Gomez in the box below.

       **B** *I* U   $x_2$   $x^2$  

Paragraph ▾  ▾        

Reference Material

Pre-seen

It is now 5 January 2026. There was a flood in the factory on 10 December 2025 which destroyed one of the ovens. Halfpenny is in the process of obtaining a replacement oven. Gourmetopia entered liquidation on 4 January 2026 and it is expected that no payments to its suppliers will be made.

Lottie Phipps, Finance Director, calls you into her office and says:

"The Senior Management Team (SMT) is due to meet today to discuss how the destroyed oven (Oven B) and its replacement will be recorded in the financial statements for the year ended 31 December 2025. I have summarised the information for both the destroyed oven and the new oven we are purchasing in Schedule 1, which I will give you shortly.

Please prepare a briefing note which explains:

- Based on the information in Schedule 1, how Oven B and the new oven will be recorded in the financial statements for the year ended 31 December 2025.
- (sub-task (a) = 40%)

We also heard today that Gourmetopia went into liquidation on 4 January and that it will not be making any payments to suppliers. The SMT also wants to discuss the impact of this on our financial statements. I have summarised information about our accounts receivable balance and inventory for Gourmetopia in Schedule 2, which I will also give you shortly.

Please include in your briefing note an explanation of:

- How the issues in Schedule 2 will affect the financial statements for the year ended 31 December 2025.
- (sub-task (b) = 32%)

Gourmetopia will not be ordering any further bread, so for 1 month we will have spare production capacity. We are considering a short-term promotional campaign for Rustic bread to increase demand. The level of additional demand will depend on how successful the promotional campaign is but we need to decide on the level of additional production now. I have prepared a pay-off table (Schedule 3, which I will give you shortly) showing the additional contribution per day from each combination of production and demand. I have also prepared a regret table (also in Schedule 3).

Please also include in your briefing note an explanation of:

- How the information in Schedule 3 can be used to help us decide which level of additional production to choose using maximax, maximin and minimax criteria and identify any conflicts that could arise."
- (sub-task (c) = 28%)

Lottie then sends you Schedules 1, 2 and 3, which can be found by clicking on the Reference Material button above.

**Schedule 1: Oven information**

**Summary of information for Oven B**

Detail	K\$
Cost	580,000
Accumulated depreciation	230,000
<b>Carrying amount on 31 December 2025</b>	<b>350,000</b>

**Notes:**

- The oven had a scrap value of K\$25,000 and was removed from site on 31 December 2025.
- The information included in the table is before any adjustments to the financial statements have been made.

**Summary of information for replacement oven**

Detail	K\$
Cost (to be paid on 15 January 2026)	630,000
Installation (completed on 31 December 2025)	25,000
Testing (completed on 31 December 2025)	5,000

**Note:**

- The amount charged for oven installation and testing was paid on 20 December 2025.



## Schedule 2: Gourmetopia Information

### Unpaid Gourmetopia invoices

Invoice date	Invoice number	Unpaid amount K\$
22 December 2025	G72253	223,000
03 January 2026	G87445	300,000
<b>Total</b>		<b>523,000</b>

#### **Note:**

- In November 2025, Gourmetopia exceeded its credit limits and paid its outstanding invoice late. After this, we agreed to continue trading with Gourmetopia on revised credit terms with a reduced credit limit and shortened payment terms of 15 days.

### Gourmetopia inventory

Finished Goods	Cost K\$
Bread not delivered	21,357

#### **Note:**

- Gourmetopia did not collect its bread order on 30 December 2025. The bread had an expiry date of 4 January 2026. It could not be sold to another customer and therefore was sold for animal feed for K\$2,000 on 4 January 2026.

**Schedule 3****Rustic bread: additional contribution - K\$ per day**

Additional demand	Additional production		
	Level 1	Level 2	Level 3
Low	3,514	(3,150)	(11,719)
Medium	7,522	10,880	2,311
High	7,522	14,888	22,354










**Regret table for additional Rustic bread production K\$**










Additional demand	Additional production		
	Level 1	Level 2	Level 3
Low	0	6,664	15,233
Medium	3,358	0	8,569
High	14,832	7,466	0



 Reference Material Pre-seen

Write the briefing note requested by Lottie Phipps in the box below.

       **B** *I* U   $x_2$   $x^2$  

Paragraph ▾  ▾        



Thank you for completing the Operational Case Study Exam.

Before you leave, don't forget to collect your printed confirmation of attendance.

Please click the End Exam (E) button before leaving the testing room quietly.



## Operational Case Study Exam

Maximum Time Allowed: 3 Hours

Welcome, Candidate Name

If this is not your name, please let your administrator know.

Click **Next** to start the test.

This examination is structured as follows:

Section number	Time for section (minutes)	Number of tasks	Number of sub-task/s	% time to spend on each sub-task
1	45	1	3	(a) 32% (b) 52% (c) 16%
2	45	1	3	(a) 40% (b) 20% (c) 40%
3	45	1	2	(a) 52% (b) 48%
4	45	1	3	(a) 32% (b) 20% (c) 48%

Each section (task) has a number of sub-tasks. An indication of how much of the time available for the section that you should allocate to planning and writing your answer is shown against each sub-task in the text of the question (and summarised in the table above).

This information will be available for you to access during the examination by clicking on the Pre-seen button.

Reference Material

Pre-seen

Today is 1 June 2025. The Product Development Team at Halfpenny has developed a new product, U-Bake, which will be launched soon. U-Bake is a frozen part-baked loaf that consumers will finish baking at home.

You receive the following email:

**From:** Lu Chen, Large Retailers Sales Manager  
**To:** Finance Officer  
**Subject:** Credit worthiness of new customer and relevant costs of promotional campaign

Rosa Grimble, Sales & Marketing Director, suggested that you would be able to help me prepare for a customer meeting. Specifically, I need help with assessing the creditworthiness of Organica, a new customer, and compiling a list of the relevant costs of a marketing campaign for U-Bake.

Organica, a supermarket chain, is primarily looking to purchase U-Bake but it is hoped it will buy our other products too. Organica has applied for a credit account with us and has asked for a credit limit of K\$100,000. It has sent us a report from Keeland Credit Reference Agency and a letter from one of its suppliers (see the information in Schedule 1, attached) to support its application.

Please prepare a briefing paper for me that explains:

- The issues we should consider when granting credit to Organica, including any additional information required. Please also discuss the usefulness of the report and letter that Organica sent to support its application.

(sub-task (a) = 32%)

I am working with Terry South, Marketing Senior Manager, for 12 weeks on a promotional campaign to support the U-Bake launch. The Marketing Team were excited to be running the promotional campaign ourselves, but we have now been approached by an external company, Purplant, that has offered to do it. Terry has asked me to put together an analysis to decide if we should run the promotional campaign or subcontract it to Purplant. I am producing a list of the costs of running the campaign ourselves, but I am not sure if some of them are relevant for the decision. I have listed the ones I am unsure about in Table 1 (attached). I also think there may be non-financial factors we should consider.

Please also include in your briefing paper for me an explanation of:

- How to identify relevant costs and why each of the cost items shown in Table 1 is either relevant or irrelevant for the decision about subcontracting the promotional campaign.
- Two non-financial factors we should consider before making this decision.

(sub-task (b) = 52%)  
(sub-task (c) = 16%)

Lu Chen  
Large Retailers Sales Manager  
Halfpenny

The attachments to the email can be found by clicking on the Reference Material button above.



**Schedule 1: Supporting information supplied by Organica****Keeland Credit Reference Agency****Credit Report on Organica 31 Mar 2025****General:**

Organica was incorporated in Keeland in 2021 and has shown growth until recently when it was affected by the downturn in the organic produce market, following a rise in inflationary pressure in Keeland.

**Credit rating:**

Organica's credit rating has been downgraded from A- to B+ following issues with its suppliers. This is expected to reduce Organica's potential for sales growth.

*Note: We would not recommend giving credit to firms with a credit rating lower than B+*

**PURE BAKERY**

To whom it may concern,

This is a trade reference for our customer, Organica. We confirm Organica has a credit limit of K\$40,000 with us on 25 March 2025.

Yours faithfully,

Paul Knott

General Manager  
Pure Bakery

















## Schedule 1 Table 1

**Table 1: Extract of costs for internal promotional campaign for U-Bake**


Cost	K\$	Commentary
Market research report	5,000	This report, completed last month, formed the basis for planning the promotional campaign. The invoice has been paid.
Fixed overheads (i) to date	7,000	Campaign planning to date has taken 20 days. K\$7,000 is the amount of general fixed overhead normally charged to the Marketing Department for 20 days. The campaign will not result in any incremental fixed overheads.
(ii) future	Day rate	During the campaign, fixed overheads will be charged at the same daily rate as above.
Food photographer	10,000	We have contracted a specialist photographer to take promotional shots of U-Bake on 1 July 2025 at an agreed fee of K\$10,000. If we cancel the photo shoot now, we have to pay 60% of the agreed fee.
Building A	7,500	The internal team for this project would be housed in Building A of our Production Facility when the campaign starts. Renting this space to external companies has been discussed in previous Senior Management Team meetings. The appropriate rent to charge for Building A has been assessed by a specialist valuer to be K\$2,500 per month. There is currently no other demand, either internally or externally, to use Building A.


[Reference Material](#)[Pre-seen](#)


Write the briefing paper requested by Lu Chen in the box below.





Paragraph ▾


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












Reference Material

Pre-seen

Today is 1 July 2025. A machine fault has been identified.

Roger Smith, Production Senior Manager, and Pia Baz, Sales Senior Manager, call you to the Production Facility. Roger says:

"Pia and I have been discussing an issue which was reported in today's production meeting. During planned maintenance last night, the maintenance crew found an issue with the drive mechanisms on the conveyor belts which take the proved dough to the ovens. This means that we will only be able to produce about 80% of our budgeted output of loaves until the problem can be rectified in 2 weeks' time. We therefore need to decide which type of loaf should be given priority. Also, we have recently changed the contracts of the factory workers to guarantee them a minimum of 40 hours pay per week. Until the problem is rectified, we will be paying for idle time.

I recently attended a conference where throughput accounting (TA) was presented as a method of optimising output to maximise profit. I think we could use TA to prioritise production until the drive mechanisms are repaired. I have calculated some TA ratios for the Shaping & Proving Department (Table 1, which I will give you shortly) but won't have time to produce the supporting commentary. I also think TA could be useful when we start to produce our new product, U-Bake, as we will then be operating at very close to our capacity levels in some areas of the facility and we could then have other potential constraints. I want to discuss TA at the Senior Management Team (SMT) meeting tomorrow.

Please prepare a briefing note for the SMT meeting which explains:

- Throughput accounting and the ratios I have prepared to help prioritise production until the problem with the drive mechanisms is rectified.

(sub-task (a) = 40%)

- The suitability of throughput accounting for production planning at Halfpenny."

(sub-task (b) = 20%)

**Pia then continues:**

"The planning needed for U-Bake was a major exercise and required input from all departments within Halfpenny after we had forecasted sales volumes. I think we need to consider how we can improve our forecasting and planning, which starts with sales budgets, for all products and not just new ones. I think both big data and Artificial Intelligence (AI) could be of benefit.

Please can you also include in your briefing note an explanation of:



- The potential benefits for Halfpenny of using big data and AI when setting sales budgets."

(sub-task (c) = 40%)










Roger sends you Table 1, which can be found by clicking on the Reference Material button above.










**Table 1: Throughput Accounting (TA) ratios for Shaping & Proving Department for loaves**

	White	Wholemeal	Multi-seed	Rustic
	K\$	K\$	K\$	K\$
Return per Production Facility hour per batch	1,320	1,100	1,860	2,340
Production Facility cost per hour	720	720	720	720
Throughput Accounting ratio	1.83	1.53	2.58	3.25

 Reference Material Pre-seen

Write the briefing notes requested by Roger Smith and Pia Baz in the box below.

       **B** *I* U   $x_2$   $x^2$  

Paragraph ▾  ▾        



Reference Material

Pre-seen

Today is 6 October 2025. Production of U-Bake commenced on 25 August.

You receive the following email:

**From:** Evita Gomez, Finance Manager  
**To:** Finance Officer  
**Subject:** Variance analysis and possible introduction of feed forward control

I have produced the schedule of overhead variances for the 4-week period ending 30 September for the Mixing & Kneading Department (Schedule 1 attached). I am due to discuss the schedule at the Senior Management Team (SMT) meeting tomorrow.

Please prepare a briefing note which explains:

- Each of the variances in Schedule 1, the possible reasons for their occurrence and what they indicate about production performance in the Mixing & Kneading Department.

**(sub-task (a) = 52%)**

At the last SMT meeting, Jack Hobbs, Production Director, felt that our current variance analysis commentary does not help his production managers control day-to-day production at an operational level in the Production Facility. I have suggested to Jack and Lottie Phipps, Finance Director, that feed forward reporting may help to improve control for the production managers. They liked the idea and I want to present this to the other directors at the SMT meeting.

Please also include in your briefing note an explanation of:

- The difference between feed back and feed forward control and how feed forward control reports may help control production at Halfpenny.

**(sub-task (b) = 48%)**

Evita Gomez  
Finance Manager  
Halfpenny

The attachment to the email can be found by clicking on the Reference Material button above.



**Schedule 1: Mixing & Kneading variances for the 4 weeks to 30 September 2025**










Fixed production overhead variance	K\$
Expenditure	14,038 adv
Volume	52,022 fav
Capacity	86,520 fav
Efficiency	34,498 adv










**Notes:**

- This was the first complete period of production of U-Bake. U-Bake production was not included in the budget for the period which was produced at the start of the current financial year.
- Commencing production of U-Bake has taken the department from 80% to 90% utilisation of available machine hours.
- During the period, we were still experiencing issues relating to adjusting and running the machines for U-Bake.
- The fixed production overhead variances are based on the budgeted figures for the Mixing & Kneading Department for 2025 and the resultant fixed production overhead rate of K\$114.99 per machine hour.
- As U-Bake bread is part-baked and then frozen, it requires additional ingredients to maintain its quality. The effect of this is that it takes longer to mix and knead than our other breads.
- The difference in the ingredients for U-Bake meant that a new protocol for cleaning was introduced. This required extra supervisors to be recruited.

 Reference Material Pre-seen

Write the briefing note requested by Evita Gomez in the box below.

       **B** *I* U   $x_2$   $x^2$  

Paragraph ▾  ▾        

Reference Material

Pre-seen

Today is 28 November 2025. Several freezer storage rooms were added to the Production Facility when production of U-Bake started. They allow a buffer inventory of U-Bake loaves to be held.

Evita Gomez, Finance Manager, calls you into her office and says:

"Last week, there was an electrical fire in Freezer Room No. 2. The freezer room will need to be refitted, including installation of a new freezer unit, before it can be used again. The finished goods that were in the unit are smoke damaged and are unsaleable. I have produced information about the damaged items in Table 1, which I will give you shortly. We have sourced a new freezer unit from Star Freezers, (Star). Star has sent us a proforma invoice in Schedule 1, which I will also give you shortly.

I have just had a meeting with Lottie Phipps, Finance Director, and Rosa Gimble, Sales & Marketing Director. There is some concern about whether the freezer room and freezer unit should be reported under IAS 36: Impairment of Assets or not and how to treat the inventory. Lottie would like us to prepare a briefing note to present to the Senior Management Team (SMT) meeting, explaining the effect of the damage to the freezer room, current freezer unit and inventory and the purchase of the replacement freezer unit on our financial statements.

Please prepare a briefing note for Lottie which explains:

- How the damage to the assets shown in Table 1 should be reflected in the financial statements for the year ending 31 December 2025.  
(sub-task (a) = 32%)
- How, with reference to IAS 16: Property, Plant and Equipment, each of the costs of the new freezer unit in Schedule 1 should be reflected in the financial statements for the year ending 31 December 2025.  
(sub-task (b) = 20%)

Rosa understands sales volume is one of the critical success factors for our business and she monitors the overall sales of our products, including U-Bake. She would like a briefing paper to support discussion around the introduction of performance measures at the SMT meeting. She wants the measures to target the individual achievements of each member of the Sales Team. She wants to limit this to just four performance measures: the same measures would be used for each member of the team.

Please suggest in your briefing note for the SMT meeting:

- Four performance measures and explain how each of them would be calculated and why they would be appropriate for measuring the performance of individual sales staff."  
(sub-task (c) = 48%)

Evita Gomez then sends you Table 1 and Schedule 1, which can be found by clicking on the Reference Material button above.



Table 1 Schedule 1

**Table 1: Items damaged in the electrical fire**

Item	Carrying Amount	Commentary
	K\$	
Freezer unit	150,000	Following a safety inspection, the freezer unit has been written off and can only be sold for recycling. A company has agreed to buy the unit for K\$4,000 for recycling. The freezer unit was not insured owing to an administrative error.
Freezer room	250,000	The original freezer room cost K\$280,000 and depreciation of K\$30,000 has been charged to the financial statements up to the date of the fire. An insurance assessor has assessed the current value of the freezer room as being nil due to the damage sustained. They have recommended a total refurbishment which will have a cost of K\$300,000. This amount will be paid by our insurers. The refurbishment will begin in December 2025 and take 2 weeks to complete.
Frozen bread	9,200	This is the cost of 10,000 U-Bake loaves which were stored in the freezer at the time of the fire. The bread must be disposed of in line with health and safety legislation. This means it must be sent to an incinerator at a cost of K\$2,000.

Schedule 1: Invoice for replacement freezer unit



Proforma Invoice for purchase of Meteor Freezer Unit

Customer: Halfpenny










Date: 28 November 2025











Detail	K\$	K\$
Meteor Freezer Unit	153,000	
Less discount	4,000	
		149,000
Delivery: expected 11 December 2025	3,000	
Installation: expect to complete 12 December 2025	12,000	
Safety certificate: expect to issue 12 December 2025	500	15,500
		164,500
Payment		
Deposit due 11 December 2025		20,000
Balance due 16 January 2026		144,500
		164,500



 Reference Material Pre-seen

Write the briefing note requested by Evita Gomez in the box below.

       **B** *I* U   $x_2$   $x^2$  

Paragraph          



Thank you for completing the Operational Case Study Exam.

Before you leave, don't forget to collect your printed confirmation of attendance.

Please click the End Exam (E) button before leaving the testing room quietly.



## Operational Case Study Exam

Maximum Time Allowed: 3 Hours

Welcome, Candidate Name

If this is not your name, please let your administrator know.

Click **Next** to start the test.

This examination is structured as follows:

Section number	Time for section (minutes)	Number of tasks	Number of sub-task/s	% time to spend on each sub-task
1	45	1	2	(a) 52% (b) 48%
2	45	1	3	(a) 32% (b) 32% (c) 36%
3	45	1	3	(a) 32% (b) 40% (c) 28%
4	45	1	3	(a) 52% (b) 24% (c) 24%

Each section (task) has a number of sub-tasks. An indication of how much of the time available for the section that you should allocate to planning and writing your answer is shown against each sub-task in the text of the question (and summarised in the table above).

This information will be available for you to access during the examination by clicking on the Pre-seen button.

📖 Reference Material

📖 Pre-seen

Today is 1 June 2025. The Senior Management Team (SMT) of Halfpenny is just about to embark on a project to consider how competitiveness and sustainability can be improved within the business.

You receive the following email:

**From:** Evita Gomez, Finance Manager  
**To:** Finance Officer  
**Subject:** Variances and CGMA cost transformation model

The SMT is meeting tomorrow to discuss the latest variance reports. I would like you to complete the commentary for the production overhead variances for the Baking Department for May 2025. Attached in Table 1 are the variable and fixed production overhead variances for the department and some notes.

Please prepare content for a report to the SMT which explains:

- What each of the variances in Table 1 means and possible reasons for their occurrence.

**(sub-task (a) = 52%)**

At the meeting tomorrow, the SMT is also going to start to consider its project to improve competitiveness and sustainability. Lottie Phipps, Finance Director, has recently attended a seminar about the CGMA's cost transformation model and feels that it would be useful for the SMT to consider this.

The three areas of the model that Lottie is particularly interested in are:

1. Engendering a cost-conscious culture.
2. Incorporating sustainability to optimise profits.
3. Understanding cost drivers and cost accounting systems and processes.

Please also prepare content for a report to the SMT which explains:

- The three areas of the CGMA cost transformation model identified above, how these already apply to our business and how they could be applied in the future.

**(sub-task (b) = 48%)**

Evita Gomez  
Finance Manager  
Halfpenny

The attachment to the email can be found by clicking on the Reference Material button above.



**Table 1: Production overhead variances for the Baking Department for May 2025**










	Variable overhead K\$	Fixed overhead K\$
Expenditure	106,776 A	82,280 F
Efficiency	9,475 A	14,212 A
Capacity	Not applicable	95,557 F










**Notes:**

- Production overheads for the Baking Department are absorbed on the basis of machine hours.
- During May, the following happened:
  - Actual production was higher than budget. As a result, scheduled maintenance of the ovens by external contractors was delayed until June and unplanned overtime was worked.
  - There was a significant increase in electricity costs due to global increases in the price of electricity on the wholesale market.
  - There was an issue with the production line that feeds into the ovens. This meant that production had to be stopped for a few hours so that the line could be disconnected to be tested. During this time, the ovens were left on, as David Good, Baking Manager, believed that turning off the ovens and then heating them up again would ultimately cost more than keeping the ovens hot. Following testing, the line was recalibrated to operate at a slower rate and reconnected.
  - Three supervisors left the department at the start of the month. At the weekly team meeting, it was suggested that only one new supervisor was needed given recent changes in working practices. Hence, only one new supervisor was employed.

 Reference Material Pre-seen

Write the report contents requested by Evita Gomez in the box below.

       **B** *I* U   $x_2$   $x^2$  

Paragraph ▾  ▾        

Reference Material

Pre-seen

It is now the middle of July 2025. The Senior Management Team (SMT) has been working on its competitiveness and sustainability project. You are called into the office of Lottie Phipps, Finance Director, where she says:

"The SMT has decided to invest in a wind turbine to provide self-generated power for the Production Facility. Table 1, which I will send you shortly, includes information about this wind turbine.

Please prepare a briefing paper for the SMT which explains:

- How the wind turbine will be recognised and initially measured in our financial statements for the year ending 31 December 2025. Please also explain the impact of the wind turbine on our reported profit for the year ending 31 December 2025.

**(sub-task (a) = 32%)**

The SMT has also decided to replace some of the ovens with larger, more power efficient ovens. Table 2, which I will send you shortly, includes information about the old ovens.

Please include in your briefing paper an explanation of:

- How the old ovens will be classified and measured in our financial statements for the year ending 31 December 2025, assuming that the sale occurs in 2026.

**(sub-task (b) = 32%)**

The SMT is keen to set up a key performance indicator (KPI) dashboard to monitor sustainability in the production process.

Please include in your briefing paper suggestions of:

- Three KPIs that are appropriate to monitor the sustainability of the production process. Please explain how each KPI would be measured and why it would be appropriate."

**(sub-task (c) = 36%)**

Lottie then sends you Table 1 and Table 2, which can be found by clicking on the Reference Material button above.

**Table 1: Wind turbine**

Asset	Information
Wind turbine	<ul style="list-style-type: none"> <li>• Installation will commence on 1 August and is scheduled to be completed by 31 October this year.</li> <li>• Total purchase price of K\$1,850,000. This includes K\$600,000 for three blades.</li> <li>• Installation and connection will cost K\$123,500.</li> <li>• A safety inspection (legally required before the wind turbine can be connected) will cost K\$12,000 and happen during November.</li> <li>• We expect the wind turbine to be providing power from 1 December 2025.</li> <li>• Useful life of the wind turbine is 15 years, with the blades replaced every 5 years.</li> </ul>

## Table 1 Table 2










**Table 2: Old ovens**









Asset	Information
Old ovens	<ul style="list-style-type: none"><li>• Carrying amount on 1 January 2025, K\$62,000, with depreciation of K\$1,000 per month.</li><li>• Disconnected on 31 August 2025.</li><li>• Safety testing (necessary to be able to sell the ovens) completed by the end of September at a cost of K\$1,500.</li><li>• Expected sale proceeds of K\$50,000 (based on a specialist external valuation).</li><li>• Selling costs of K\$3,400.</li><li>• To be marketed from 1 October at the valuer's price of K\$50,000 and the expected time for sale is 7 months.</li></ul>



 Reference Material Pre-seen

Write the briefing paper requested by Lottie Phipps in the box below.

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Paragraph        

📖 Reference Material

📖 Pre-seen

It is now August 2025 and you receive the following email:

**From:** Evita Gomez, Finance Manager  
**To:** Finance Officer  
**Subject:** Zero based budgeting and value of perfect information

We will soon need to start determining the budgets for 2026. Following on from the Senior Management Team's (SMT's) project on cost competitiveness, it has been suggested that a zero based budgeting (ZBB) approach could be used to determine budgets for some of the activities that support production. The SMT has requested some information on how this would work in relation to employee training. Schedule 1 (attached) includes two examples of training that our production employees undertake.

Please prepare a briefing paper for the SMT which explains:

- How a ZBB approach can be applied to create a budget for production employee training costs, including the creation of decision packages, with reference to the information in Schedule 1.

(sub-task (a) = 32%)
- The benefits to the business of using a ZBB approach for budgeting support activity costs and any challenges that we might face if we did apply this approach in practice.

(sub-task (b) = 40%)

As a result of the project on sustainability, the SMT is in the process of making significant changes to the way that the company operates. The SMT is keen to promote this to our customers and wants to undertake a promotional campaign that focuses on sustainability. Three alternative campaign options are being considered. Payoff and statistical information about these campaigns is included in Table 1 and Table 2, which are attached.

An external consultancy has offered to provide perfect information about how the market will react at a cost of K\$60,000. I have calculated that the value of perfect information, before taking this cost into account, is K\$84,000. The SMT has decided to pay for this perfect information.

Please include in your briefing paper an explanation of:

- Whether, in the event of each of the three possible market reactions, it will have been worthwhile paying K\$60,000 for the perfect information, assuming that the SMT made the decision about which promotional campaign to undertake using a risk neutral approach to the decision.

(sub-task (c) = 28%)

Evita Gomez  
Finance Manager  
Halfpenny

The attachment to the email can be found by clicking on the Reference Material button above.

## Schedule 1 Table 1 &amp; Table 2

**Schedule 1: Production employee training**

Example of training	Detail
Induction	All production employees have to undertake induction training before commencing their role. The induction course was developed 8 years ago and is the same for all employees. It is delivered in-house and takes 1 day and covers all aspects of production.
Health & Safety	There is a legal requirement for all production supervisors and managers to undertake a Health & Safety training course and to pass a test (set nationally) every 2 years. The course is delivered by an external training company and all relevant employees must pass the test to be certificated.



Schedule 1 Table 1 & Table 2

**Table 1: Additional profit/(loss) after campaign costs from promotional campaigns**










Expected market reaction	Probability	Campaign 1 K\$000	Campaign 2 K\$000	Campaign 3 K\$000
Very good	0.3	2,200	2,300	1,750
Good	0.5	1,050	900	820
Poor	0.2	50	(350)	320










**Table 2: Statistical information based on Table 1**

	Campaign 1	Campaign 2	Campaign 3
Expected value (K\$000)	1,195	1,070	999
Co-efficient of variation	0.63	0.87	0.53

 Reference Material Pre-seen

Write the briefing paper requested by Evita Gomez in the box below.

       **B** *I* U   $x_2$   $x^2$  

Paragraph ▾  ▾        



Reference Material

Pre-seen

It is now November 2025. With the aim of utilising spare capacity in the Production Facility, the company has been producing special orders of two new types of Rustic loaf.

Evita Gomez, Finance Manager, calls you and says:

"Jack Hobbs, Production Director, has told me about a couple of issues affecting next week's production. Firstly, one of our seed suppliers has informed us of a fire at its depot, which means that it cannot supply us next week. Inventory levels are low because, since the sustainability project, we have been deliberately holding lower levels of raw material inventory. Secondly, some of the new ovens that we installed earlier in the year have faults which need to be fixed next week, limiting the number of baking hours available.

Jack has looked at the production schedule for next week and has identified the amount of seeds and baking hours available for the special orders of the new Rustic loaves. I have used this to produce a linear programming graph (Graph 1, which I will send you shortly).

Please prepare a briefing paper for the Senior Management Team (SMT) which explains:

- Graph 1, how to use the graph to determine the optimal production plan and what that optimal production plan is. Please also explain factors we should consider before proceeding with this production plan.

**(sub-task (a) = 52%)**

We have been operating with lower raw material inventory levels for a few months now and this is not the first time we have had issues with the availability of grains and seeds from certain suppliers, principally because of variability in lead times. Also, we have been ordering in smaller quantities, which means that we have lost bulk purchase discounts. It has been suggested that the Economic Order Quantity (EOQ) model could be used to determine our ordering policy for grains and seeds.

Please include in your briefing paper an explanation of:

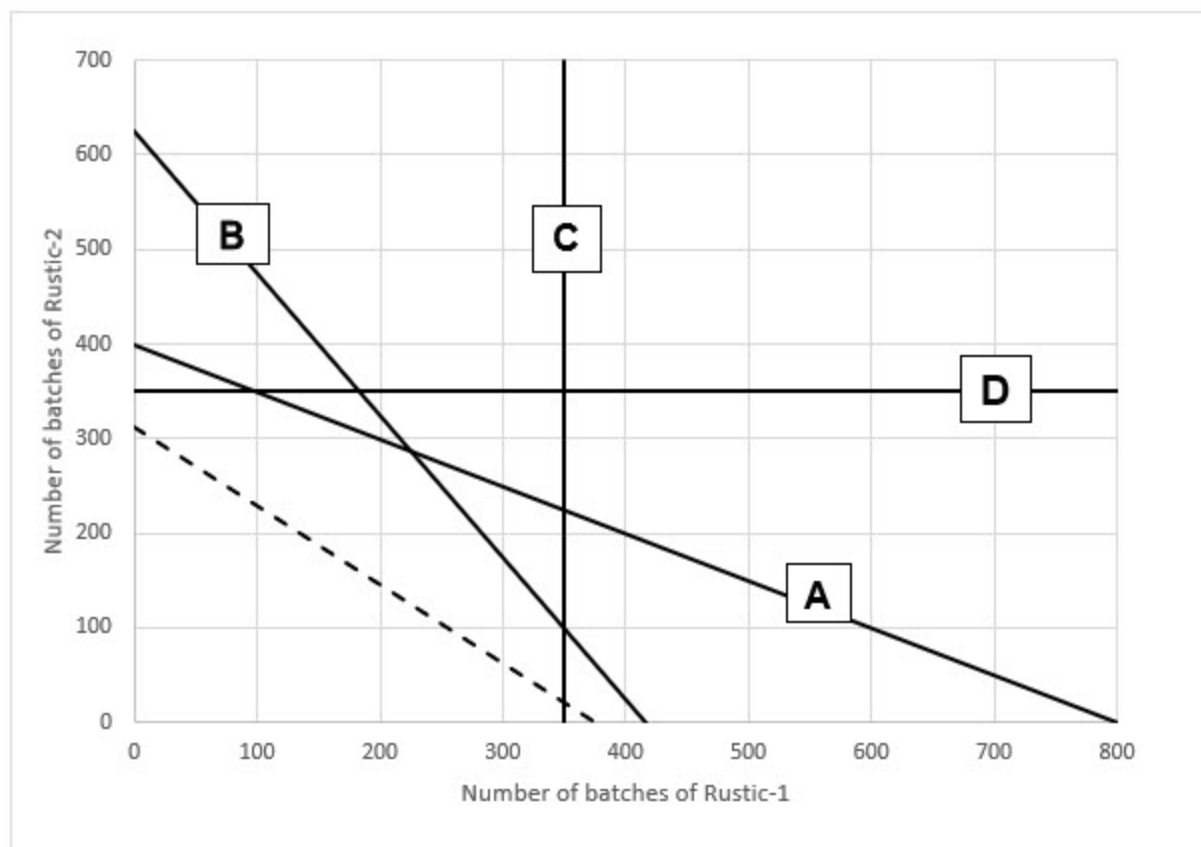
- The EOQ model and the information needed to determine the economic order quantity for each type of grain and seed that we purchase.

**(sub-task (b) = 24%)**



- The problems associated with the assumptions underpinning the model and how we can overcome these problems by adapting the model."

**(sub-task (c) = 24%)**










Evita then sends you Graph 1, which can be found by clicking on the Reference Material button above.










**Graph 1: Linear programming graph****Key to the graph:**

- Lines A and B show the availability of seeds and baking hours, respectively.
- Lines C and D are maximum demand constraints based on the special orders for Rustic-1 and Rustic-2 loaves, respectively.
- The dotted line is an iso-contribution line.

 Reference Material Pre-seen

Write the briefing paper requested by Evita Gomez in the box below.

       **B** *I* U   $x_2$   $x^2$  

Paragraph ▾  ▾        



Thank you for completing the Operational Case Study Exam.

Before you leave, don't forget to collect your printed confirmation of attendance.

Please click the End Exam (E) button before leaving the testing room quietly.



## Operational Case Study Exam

Maximum Time Allowed: 3 Hours

Welcome, Candidate Name

If this is not your name, please let your administrator know.

Click **Next** to start the test.



This examination is structured as follows:

Section number	Time for section (minutes)	Number of tasks	Number of sub-task/s	% time to spend on each sub-task
1	45	1	3	(a) 40% (b) 28% (c) 32%
2	45	1	3	(a) 36% (b) 36% (c) 28%
3	45	1	2	(a) 48% (b) 52%
4	45	1	3	(a) 32% (b) 28% (c) 40%

Each section (task) has a number of sub-tasks. An indication of how much of the time available for the section that you should allocate to planning and writing your answer is shown against each sub-task in the text of the question (and summarised in the table above).

This information will be available for you to access during the examination by clicking on the Pre-seen button.

## Pre-seen

Today is 1 June 2025. Halfpenny believes the popularity of organic bread is set to increase and is looking to move into that market. The company started refitting an empty building on its current site in January 2025 to be used to produce organic bread. The Sales Team is also looking for new organic bread customers. Fresh Picks is an organic food convenience store chain with a zero-waste policy. Halfpenny has signed a contract with Fresh Picks, a new customer, to produce its organic breads. The contract is due to start in approximately 6 months.

You receive the following email:

**From:** Evita Gomez, Finance Manager  
**To:** Finance Officer  
**Subject:** Beyond budgeting and costs of bread ordering app

The Senior Management Team (SMT) has become concerned that our current budgeting system will not be sufficiently responsive to cope with the Fresh Picks contract. Our current contracts are largely long term with stable volumes, whereas the Fresh Picks contract can vary volume and bread type and has low profit margins. The SMT is also concerned that such contract terms might become more common in the future. Lottie Phipps, Finance Director, wonders if beyond budgeting might help us to become more responsive. She would like to discuss this with the SMT in its next meeting.

Please prepare a briefing note which explains:

- The benefits of using beyond budgeting, particularly in view of the varying demand volumes and low profit margins seen in contracts, increasing our need to be more responsive.

**(sub-task (a) = 40%)**

We currently use a paper-based daily ordering system for convenience store customers. This is very labour intensive and prone to errors. With the volume increases expected from the Fresh Picks contract and the low profit margins, we feel this is the right time to develop an app to replace the paper-based ordering system. The SMT wants to discuss this at the next meeting and has asked us to produce a briefing note that details the types of costs we might encounter when developing a bread ordering app.

Please also include in your briefing note an explanation of:

- The types of costs we will see when developing the bread ordering app.
- The future issues and ongoing costs of the bread ordering app we should consider.

**(sub-task (b) = 28%)**















**(sub-task (c) = 32%)**

Evita Gomez  
Finance Manager  
Halfpenny

Reference Material










Pre-seen

Write the briefing note requested by Evita Gomez in the box below.



Paragraph ▾

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Reference Material

Pre-seen

Today is 2 June 2025. As organic breads must be produced separately to Halfpenny's other breads, Halfpenny started refitting an empty building on its existing site, in January 2025, which will be used for organic breads production. The refit is continuing and the cost of the refit has now exceeded the original budget.

Evita Gomez, Finance Manager, calls you into her office and says:

"Jack Hobbs, Production Director, has given me details of an oven that is to be purchased for the new organic facility included in Table 1 (which I will give you shortly). The Senior Management Team (SMT) is keen that we capitalise as much of the cost of this oven as possible and wants to discuss this at its meeting tomorrow.

Please provide a briefing note that explains:

- Using Table 1, how the costs of the oven will be recorded in the financial statements for the year ending 31 December 2025.

**(sub-task (a) = 36%)**

We are looking to lease some of the plant and equipment needed. The SMT wants to understand how leased items will be recorded. As an example, to discuss in the SMT meeting, Jack has provided us with details of a leased conveyor belt system which will be installed between the Kneading & Mixing and Shaping & Proving Departments. The details are in Table 2, which I will give you shortly.

Please also include in your briefing note an explanation:

- Using Table 2, of how the lease liability and right-of-use asset for the conveyor belt lease should be initially measured in our financial statements.

**(sub-task (b) = 36%)**

The refit has cost more than budgeted and the SMT is considering ways to raise short-term finance. It is considering using either invoice discounting or factoring rather than extending our overdraft which we have done in similar situations previously. Keeland Sales Finance (KSF) has given us two proposals, one for invoice discounting and one for factoring. I have summarised these in Schedule 1, which I will give you shortly. An overdraft to cover the amount we need will have an annual fee of K\$15,000 and an annual interest cost of 7%.

We have never used invoice discounting or factoring before so the SMT wants to understand how these methods will be different to an overdraft.

I would also like you to include in your briefing note an explanation:

- Using the information in Schedule 1, of the differences between invoice discounting, factoring and an overdraft."

**(sub-task (c) = 28%)**

Evita then sends you Tables 1 and 2 and Schedule 1, which can be found by clicking on the Reference Material button above.

**Table 1: Details of oven to be purchased for organic facility refit**

Oven Details	K\$	Notes
Cost	267,800	Cost of the oven less any supplier discounts.
Electricity upgrade	9,300	Cost of upgrading electricity supply which is required specifically to allow this oven to work.
Delivery and installation	15,670	This includes situating the oven at its operating site.
Annual Safety Certificate	2,312	Required for each year of the life of the asset.
Staff training	2,500	To allow Halfpenny's maintenance team to install machinery.

**Note:**

- The cost of the oven will be invoiced on 10 July 2025 and the oven should be fully operational by 15 July 2025.



**Table 2: Details of lease for conveyor belt**



Lease payment per year	Note 1	K\$67,923
Lease period	Note 3	5 years
Owner at end of lease period	Note 4	Lessor

**Notes:**










- Lease payments would be made annually in advance, with the first payment being due on 1 October 2025.
- We sourced the conveyor belt system through a leasing agent. The agent was paid K\$1,500 on the date we signed the order for the new conveyor belt.
- The interest rate implicit in the lease is 14.6%.
- There is an option for Halfpenny to purchase the conveyor belt system at the end of the lease for the sum of K\$56,112, although this is unlikely to be taken up. If the option to purchase the conveyor belt system is not taken up, the leasing company will remove the conveyor belt system at the end of the lease period for a sum of K\$10,663, which is payable by the lessee.










**Schedule 1: Extracts from Invoice Discounting and Factoring proposals from Keeland Sales Finance (KSF)****Notes:**

1. KSF will own the debts assigned to them whether we use invoice discounting or factoring.
2. The invoice discounting facility is without recourse, whilst the factoring facility is offered with recourse.
3. Interest costs for both the invoice discounting and factoring facilities are 5.5%.
4. Annual administration fees for the invoice discounting facility are K\$40,000, whilst for factoring they are K\$210,000.

 Reference Material Pre-seen

Write the briefing note requested by Evita Gomez in the box below.

       **B** *I* U   $x_2$   $x^2$  

Paragraph ▾  ▾        

## Pre-seen

Today is 1 July 2025. The Fresh Picks contract is now due to start on 1 November 2025. Fresh Picks' contract allows it to vary the volume and types of breads it orders and has low profit margins. The contract also includes a zero-waste performance target and includes financial penalties for missing performance targets. The Senior Management Team (SMT) wants to ensure production waste is minimised so they do not incur financial penalties.

You receive the following email:

**From:** Evita Gomez, Finance Manager

**To:** Finance Officer

**Subject:** KPIs and the potential use of big data and big data analytics when preparing sales budgets

As you will recall, we are developing an app to replace our paper-based ordering systems for convenience stores. We hope the new system will reduce the number of ordering errors, such as missed orders and incorrect quantities and bread types as well as to reduce waste. This waste issue has become even more important due to the financial penalties included in the Fresh Picks contract for exceeding agreed waste levels. Roger Smith, Production Senior Manager, has asked us to develop Key Performance Indicators (KPIs) so we can monitor waste levels and ensure the ordering app is working accurately.

Please prepare a briefing note for Roger Smith which:

- Suggests two KPIs to monitor waste and two KPIs to monitor the effectiveness of the new app. For each KPI, explain how it would be measured and why it would be appropriate.



**(sub-task (a) = 48%)**

As the SMT suspected, we are now seeing an increasing trend in customers wanting to be able to vary demand daily. This will make budgeting very difficult. Lottie Phipps, Finance Director, recently attended a conference which discussed big data and data analytics in the bakery industry and we are both keen to understand how they may be used to help the business with preparing the sales budget in the future.










Please also include in your briefing note:










- An explanation of how big data and big data analytics may be used to support planning and control in our sales budgets.

**(sub-task (b) = 52%)**

 Reference Material Pre-seen

Write the briefing note requested by Roger Smith in the box below.

       **B** *I* U   $x_2$   $x^2$  

Paragraph ▾  ▾        



Reference Material

Pre-seen

Today is 6 December 2025. The Fresh Picks contract has been running since 1 November 2025. Organic bread production includes White, Wholemeal, Multi-seed and Rustic bread types.

You receive the following email:

**From:** Evita Gomez, Finance Manager  
**To:** Finance Officer  
**Subject:** Sales variances, production issues and a new contract for Organic Food Festival

The Senior Management Team (SMT) is meeting tomorrow to discuss the Fresh Picks contract. It is particularly interested in reviewing the sales of organic loaves to Fresh Picks, given its earlier concerns about the terms of the contract allowing Fresh Picks to vary the volumes it orders daily. I have prepared the usual three sales variances we discuss at SMT meetings (Table 1, attached) for the first 4 weeks of the Fresh Picks contract for organic loaves.

Please can you write a briefing note for the SMT meeting which explains:

- What each of the variances in Table 1 means, possible reasons for their occurrence and what they indicate about sales performance. Please also explain how suitable they are for reviewing sales of loaves to Fresh Picks.
- (sub-task (a) = 32%)

On 15 November, the ordering app crashed and we lost all the data for Fresh Picks' order of organic Rustic rolls. There was no way, in the time available, to contact each store to recreate the data. The Production Director produced a regret table (Table 2, attached) and used it to decide to bake at the medium level of output. Several days later during its investigation of the app crash, the IT Department recreated Fresh Picks' order data for the day of the crash. The SMT has noted that the recreated data shows an elevated demand level for the day of the crash, but we only produced a medium number of rolls. The SMT wants to know how the table was used and the possible impact of the decision.

Please also include in your briefing note an explanation:

- Using the information in Table 2, of why the Production Director chose the medium output level for Organic Rustic rolls and the impact of that decision.
- (sub-task (b) = 28%)

Finally, Pia Baz, Senior Sales Manager, has been offered a contract to produce heart-shaped rolls for an Organic Food Festival. She is considering the terms of the contact but is unsure about which costs should be included in the decision. She has sent us extracts of her costings in Table 3 which is also attached.

Please also include in your briefing note an explanation of:

- Why each of the items in Table 3 is relevant or irrelevant to the decision about accepting the contract from the Organic Food Festival and if any additional information is required.
- (sub-task (c) = 40%)

Evita Gomez  
Finance Manager  
Halfpenny

The attachments to the email can be found by clicking on the Reference Material button above.

**Table 1: Sales variances for Fresh Picks contract for November 2025 (loaves only)**

Breads	Profit Variances		
	Price	Volume	Mix
	K\$	K\$	K\$
White	14,000A	13,234A	7,334A
Wholemeal	9,333A	4,584A	429A
Multi-seed	27,500A	21,033A	10,711A
Rustic	23,085F	34,183F	46,642F
<b>Total</b>	<b>27,748A</b>	<b>4,668A</b>	<b>28,168F</b>

**Notes:**

- Several major roads were closed during the month due to environmental protests. The road closures delayed deliveries of finished goods and deliveries of raw materials which affected production.
- Organic Rustic loaves were used as part of a meal prepared by a celebrity chef during a travel cookery programme she was presenting. This travel cookery programme has very high viewing figures in Keeland.
- Variances were calculated using the individual units method.

**Table 2: Regret table for organic Rustic roll production K\$**

Estimated demand	Output level of Rustic organic rolls		
	Low	Medium	High
Low	0	5,229	13,361
Normal	2,510	0	9,449
Elevated	13,254	6,807	0

**Note:**

- The table was constructed using data available in our system for the first 2 weeks of the contract. This showed there were three possible levels of demand and three potential output levels. The data is correct.

















**Table 3: Extract of costs for Organic Food Festival Contract**

Cost K\$	Notes
9,000	This is the estimated cost for administration staff and delivery staff to manage the contract and deliver the rolls to the festival. It is not yet clear if existing staff will be able to complete these tasks or we will have to bring in temporary administration staff and external delivery companies.
5,000	Due to the size of the contract, Pia Baz will receive a one-off bonus of K\$5,000, paid by Halfpenny, if the contract goes ahead.
6,500	Natural food colouring, which will be purchased after the offer is accepted. Any food colouring remaining after the contract cannot be used in any of our other breads.
15,500	The production schedule shows that, at the time we will be making the bread for the Food Festival, the bakery will be working at 100% capacity. We will have to displace some production to meet the requirements of the festival contract. The displaced production would earn a contribution of K\$15,500.
16,000	This is the total production overhead that would be absorbed by the production of the rolls for the Organic Food Festival. It is made up of K\$4,800 for variable production overheads and K\$11,200 for fixed production overheads. These amounts are based on our overhead absorption rates.
5,750	Cost already paid for production of bread samples and accommodation for sales staff when visiting site for negotiations with festival organisers.

Reference Material










Pre-seen

Write the briefing note requested by Evita Gomez in the box below.



Paragraph ▾

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Thank you for completing the Operational Case Study Exam.

Before you leave, don't forget to collect your printed confirmation of attendance.

Please click the End Exam (E) button before leaving the testing room quietly.

# CGMA OPERATIONAL CASE STUDY

MAY & AUGUST 2025

## EXAM ANSWERS

### Variant 1

*These answers have been provided by CIMA for information purposes only. The answers created are indicative of a response that could be given by a good candidate. They are not to be considered exhaustive, and other appropriate relevant responses would receive credit.*

*CIMA will not accept challenges to these answers on the basis of academic judgement.*

#### TASK 1

##### Sub-task (a)

##### Lease liability

The lease liability will be initially measured at the present value of the lease payments that are unpaid on 1 July 2025, which is the commencement date of the lease. This includes the four future fixed payments of K\$150,000 a year starting on 1 July 2026 and the payment of K\$200,000 in 5 years' time.

We include the payment in 5 years' time because this is the exercise price of a purchase option, and we are reasonably certain that we will exercise this option. The discount rate used to calculate the present value should be the interest rate implicit in the lease, or if that cannot easily be determined, our incremental rate for borrowing.

For the financial statements for the year ending 31 December 2025, we will need to re-measure the lease liability. The liability initially recorded will be increased by a finance charge for the period from the date of the commencement of the lease (1 July) until the year-end (31 December) and so 6 months.

This finance charge will be calculated as the initial liability multiplied by the interest rate used to calculate the present value multiplied by 6/12. This finance charge will be charged to profit or loss for the year and will reduce profit.

The total lease liability at 31 December 2025 will be split into the element that represents a current liability, with the remainder recorded as part of non-current liabilities. The amount recorded as a current liability will represent the difference between the total liability at 31 December 2025 and the total liability at 31 December 2026.

## Right-of-use asset

The right-of-use asset will initially be measured at the initial value of the lease liability plus any lease payment made at the start of the lease term plus any lease arrangement fees. Therefore, the right-of-use asset will be initially measured at the initial lease liability explained above plus the first payment of K\$150,000 plus the lease arrangement fee of K\$14,000.

In the financial statements for the year ending 31 December 2025, the right-of-use asset will need to be depreciated in line with the principles of IAS 16: Property, Plant and Equipment. We expect to exercise the purchase option, which means that we will own the vehicles at the end of the lease term. Therefore, the depreciation period needs to reflect the useful life of the vehicles rather than the lease term.

In accordance with IAS 16, useful life should reflect the expected utility of the asset to the business and therefore should be the 8 years we expect to use the vehicles for rather than the total useful life of 12 years. If we use the straight-line method of depreciation, the charge will be calculated as the depreciable amount of the vehicles divided by 8 years multiplied by 5/12.

The depreciable amount will be the initial measurement value of the right-of-use asset less the expected residual value of the vehicles in 8 years' time. We multiply by 5/12 because we will start to depreciate the vehicles on 1 August and therefore need to include 5 months' worth of depreciation for the year ending 31 December 2025. We start from 1 August because this is the date from which the vehicles will be available for use, since they will be capable of being operated as intended only when taxed and registered.

The depreciation will be charged to the statement of profit or loss and reduce profit for the year. It will also reduce the carrying amount of the right-of-use asset, which will be included as part of non-current assets in the statement of financial position.

## Sub-task (b)

### Table 1 and risk neutral approach to decision making

Table 1 includes the possible cost of the 12-month contract with the delivery fleet maintenance company in four different situations. Because three options have been offered for the contract, this results in 12 possible outcomes.

The first situation in the table is the worst-case position where both the number of call outs and the maintenance hours per call out are high. The fourth situation shows the best-case position where both the number of calls out and the maintenance hours per call out are low. The second and third situations are combinations of high and low number of call outs and maintenance hours per call out.

The joint probability column in Table 1 represents the probability associated with each of the four situations that have been modelled. It indicates that the chance of the worst-case situation is 12% and that the chance of the best-case situation happening is 42%.

These are joint probabilities that arise from the separate probabilities associated with the number of call outs and the maintenance hours per call out. Table 1 shows that the chance of a high number of call outs is estimated at 30%, with therefore a 70% chance of a low number of call outs. Similarly, the chance of high maintenance hours per call out is 40%, with therefore a 60% chance of low maintenance hours per call out.

Table 1 also includes the expected value of each option in the contract. This represents the weighted average outcome, weighted according to the joint probabilities associated with each of the four situations given.

Using a risk neutral approach to decision making, we will select the option which gives us the best expected value. Given that our aim is to minimise cost, we would therefore select the option which gives us the lowest expected value for cost. This is Option 1, at an expected value of K\$96,330.

### **Limitations of using the information in Table 1 and a risk neutral approach**

A limitation of using the information in Table 1 is that it is based on estimates of the number of call outs, maintenance time per call out and also the probabilities associated with each of these. These estimates have been established internally by Lottie Phipps but given that the vehicles are smaller than our normal delivery vehicles and potentially will operate differently, these estimates are likely to be very subjective.

Another limitation is that Table 1 models only four situations, based on high and low numbers of call outs and maintenance hours per call out. This is potentially an over-simplification. In reality, there may be many different possible levels of each variable, meaning that there are multiple possible situations and outcomes.

A limitation of using a risk neutral approach to the decision is that we ignore risk. We would select Option 1 using this approach, but this ignores the fact that if the best-case situation were to happen (which has a 42% chance of happening), Option 3 would give a lower cost. A risk neutral approach does give us the best decision in the worst-case situation, but there is only a 12% chance of this occurring based on the estimates used.

## TASK 2

### Sub-task (a)

#### What-if analysis

Table 1 shows the level of profit or loss expected from the new direct business for the 5-month period from 1 August to 31 December 2025 under combinations of different average selling price, fixed costs and sales volume. There are 27 combinations shown in Table 1, each with a different expected profit outcome.

Our current draft budgeted profit is K\$850,000, which is the outcome in the middle of Table 1. This means that in our draft budget we are assuming an average selling price of K\$1.05, fixed costs of K\$4,100,000 and sales volume of 9,000,000 units. These are all in the middle of the possibilities being modelled.

Table 1 shows that if sales volume was 7,500,000 units rather than 9,000,000 units, we would expect to generate a lower profit than budgeted in all but two situations (which is where average selling price is at its highest of K\$1.20 and fixed costs are either the same or lower than the draft budget). The analysis also indicates that at this level of sales, we would make a loss if the average selling price was K\$0.95, regardless of the level of fixed costs.

At the other extreme, if sales volume was 10,500,000 units rather than 9,000,000 units, we would generate a higher level of profit than the draft budget as long as average selling price didn't fall to K\$0.95 and fixed costs were either as budgeted or higher than budget.

In terms of average selling price, Table 1 indicates that if this reduced to K\$0.95, in all but one situation profit would be less than budget, and in five out of the nine possible situations, this would result in a loss. Conversely, if the average selling price is increased to K\$1.20, we can expect a higher profit than budget unless we sell only 7,500,000 units and fixed costs are higher than the draft budget.

Also, if we focus on fixed costs, Table 1 indicates that if this rises to the highest level of K\$4,500,000, this will generate a loss if, at the draft budget average selling price of K\$1.05, we only sold 7,500,000 units. A loss would also arise at the draft budget sales volume of 9,000,000 units if average selling price was only K\$0.95.

Even if fixed costs were lower than the draft budget, there is still the potential for a loss or a lower level of profit than the draft budget, at lower sales volumes and average selling price.

### Sub-task (b)

#### Limitations of the what-if analysis in Table 1

One limitation with the what-if analysis in Table 1 is that it is very simplistic. We have assumed that for each of the three uncertain budget variables, there are three possibilities, leading to 27 possible outcomes. In reality, there will be many more possible outcomes than this. For example, fixed costs and sales volume could be anywhere within the range between the highest and the lowest estimates. It might be useful to undertake more sophisticated computer modelling to consider multiple scenarios.



Another limitation is that the analysis is based on a budgeted mix of products. Selling prices and variable cost per unit vary considerably across our range of products and therefore a change in the mix of products sold will impact the analysis.

For example, a greater proportion of Rustic loaves compared to White loaves will increase both the average selling price and average variable cost per unit. Whilst the former will increase and the latter will decrease profit, the overall impact will be a higher profit given that the c/s margin for Rustic is higher than that for White.

A final limitation is that the analysis in Table 1 does not give us any indication of the likelihood of any of these possibilities happening. It would be useful to understand the probabilities associated with each of the possible sales volumes.

For example, if there is a high probability of a lower level of sales volume, then this would indicate that we would need to be careful in terms of the level of discount that we give to our direct customers to try and keep the average selling price above K\$1.05 and also to ensure that fixed costs are controlled.

### **Sub-task (c)**

#### **How a rolling budgets approach would work**

A rolling budgets approach is a continuous process where budgets are updated throughout the budget period and always cover a fixed period (usually 12 months). This updating can be done on a monthly or quarterly basis. As each period passes, that period is removed from the budget, and a new period added to the end, such that the budget is always for the next 12 months ahead. In addition, as each period is added, management can take the opportunity to review and, if necessary, revise the standards and budget for the existing as well as the new periods.

#### **Potential benefits**

A potential benefit of this approach is that we would be continuously considering the appropriateness of standards within the production budget. This means that, where necessary, standards would be updated; for example, to reflect additional overheads arising from new equipment and additional indirect workers in the Production Facility. In turn, this would lead to more meaningful performance appraisal because variances would more likely arise from operational issues rather than planning issues.

Another benefit is that the budget would always look 12 months ahead, compared to our current situation where at this point in time our production budget only considers the next 5.5 months. We have new product launches happening over the next 12 months and using a rolling budgets approach means that the production budget will incorporate the impact of these new products. This will be useful for ensuring that we have adequate resources in the right place at the right time to support these launches.

#### **Potential drawbacks**

A potential drawback is that using a rolling budgets approach is more time consuming compared to our current annual budget approach. It will use management time that they might feel would be better used on other activities such as ensuring that the new product launches are successful or ensuring that new workers are appropriately trained.

In addition, it's possible that constantly changing standards, or increasing the challenge in budget targets, could have a demotivating impact on production managers. They may feel that the changes are made to add pressure or to push them harder rather than as a result of changes in the working environment, especially if they are not involved in the budget setting process itself.

## **TASK 3**

### **Sub-task (a)**

#### **Receiving**

Receiving involves moving pallets of finished products into the appropriate storage bay within the distribution hub. The costs of this activity will include the wages of the forklift operators moving the pallets and the costs of operating the forklift trucks that are used for this activity (such as depreciation and power).

The specific activity that causes these costs to be incurred will be the movement of an individual pallet of a single product and therefore a suitable cost driver might be per pallet. However, this will only be appropriate if the movement of each pallet is identical. Given that each product has its own storage bay, it is likely that each type of pallet will require a different amount of time, and therefore perhaps a more appropriate cost driver will be forklift operator hours.

Given that cost is incurred each time a pallet is moved we need to ensure that the number of pallet movements is minimised in order to control costs. This can be achieved by ensuring that pallets are always full and by increasing the amount of products carried per pallet, which may mean increasing the size of a pallet.

#### **Picking**

Picking involves moving a wheeled cage around the storage bays and picking the products required for a single order into the cage. The costs of this activity include the wages of the picking employees as well as depreciation and maintenance costs of the cage itself and the costs associated with the electronic equipment used to display the order and scan QR codes.

For picking, there are two main activities: picking the items and then loading the cage into the delivery truck and therefore these could be viewed separately. For the activity of picking, each order will be different and therefore each order will take a different amount of time to pick. Therefore, the cost driver here will be picking time. For loading, presumably each cage takes the same amount of time to load and therefore the cost driver here would be per cage loaded.

To control the cost of picking, we need to minimise the time taken picking products for each order. This could be achieved by making sure that the storage bays for the most popular products are closest to the picking hub. We could also consider mechanising the movement of the cages to speed up the process. In terms of loading, this could also be automated potentially, although clearly there would be additional costs involved with mechanisation which may actually outweigh the time cost saving.

#### **Delivery**

There are many costs associated with direct delivery to the customer including drivers' wages and the costs of operating the delivery trucks (depreciation for the right-of-use asset, maintenance, fuel and so on).

For delivery, there are again two main activities, driving to each location and then delivering the cage to the customer. For driving, the main driver of the cost incurred (both in terms of driver wages and fuel cost) will be kilometres travelled. For delivery of the cage, the most

appropriate driver here is per cage which, given there is one cage per order, equates to per order.

To control the cost of this activity, it will be important that routes are planned to minimise the number of kilometres travelled. Clearly, the greater the kilometres, the higher the cost.

## **Sub-task (b)**

### **Factors to consider when agreeing initial credit terms**

There are two elements that together make up the credit terms that we will be agreeing with our direct customers. The first of these is the credit limit, which is the amount of credit each customer will be allowed and governs the maximum amount that the customer can owe us at any one time. The second element is the credit period, which is the length of time from the date of invoice until the date that payment is due from the customer.

When setting credit limits, we need to consider each customer separately and a starting point will be to consider the level of sales that we might expect from the customer. For example, sales to a national restaurant chain will be considerably higher than sales to a single independent restaurant or coffee shop. Clearly, the higher the overall level of expected sales, the higher the credit limit needs to be to accommodate this. In addition, larger businesses are also likely to have greater bargaining power and expect higher limits and possibly longer credit periods.

When setting both credit limits and credit periods, we will need to assess the risk of the customer not paying us by considering its creditworthiness. For each customer, we will consider any public information about the company and review its financial statements to assess its liquidity position and current payable days. The quality and veracity of the information available is likely to vary across the range of customers that we will need to review. Therefore, we will need to be mindful that, for example, the financial statements of a single restaurant business are unlikely to be audited.

The size and age of the customer should also be considered: the smaller and newer the customer, potentially the higher the risk of non-payment. The higher the risk, the lower the credit terms that should be offered. In addition, we need to consider the risk of the industry in which the customers operate. Hospitality is inherently risky because restaurants and coffee shop businesses can be significantly affected by downturns in the economic environment.

### **Managing receivable balances of direct customers**

After we start trading with direct customers, it will be important to ensure that they are adhering to their credit terms and in particular the credit period. Ultimately, we may decide to set up a specialist credit control function within our Finance Department or utilise existing resources, such as yourself, Kia, to monitor and manage the receivables.

Either weekly or monthly, we will need to generate an aged receivables report showing all amounts owed by customers, highlighting any amounts that are overdue and how overdue these amounts are. Any customer that has an overdue amount should be contacted, either by email or by telephone, and asked for payment. Customers that are continuously late in paying will be noted and discussed by senior management and, if it is deemed prudent, these customers will have the credit terms adapted, or even have their accounts put on stop.

If a customer ignores the initial request for payment, we will need to contact them again, with a firmer request for payment. Indeed, we may need to have a series of pro-forma letters available which become sterner, with the ultimate action being taking the customer to court for non-payment.



## **TASK 4**

### **Sub-task (a)**

#### **Rate variance**

The rate variance for delivery drivers is adverse, which means that we paid more per hour on average for these drivers than our standard rate. We had to engage the services of agency drivers at the start of the month, as we did not recruit enough of our own drivers. It would appear that we paid a higher hourly rate for these agency drivers compared to our own drivers.

#### **Idle time variance**

We do not budget for idle time, and therefore any driver time that has been paid for, but where the drivers were not able to operate as intended, will result in an adverse idle time variance. This idle time variance arose because some drivers had to wait for delivery vehicles to be loaded at the distribution hub and therefore were unable to start their routes straight away.

#### **Efficiency variance**

The efficiency variance for delivery drivers is favourable, which means that it took less driver hours than standard to travel the 82,000 km travelled and to make the deliveries required. There are many possible reasons for this. It might have been that drivers were able to find quicker routes than the planned routes, or that traffic conditions were better than predicted. Alternatively, drivers were just quicker making the deliveries than planned. Given that this is the first month of operation, it's likely that the standard is incorrect.

### **Sub-task (b)**

#### **Average time taken at delivery location**

This would be measured as time taken at the delivery location each day, week or month (unloading cages, delivering cages and loading empty cages) divided by the number of delivery locations for the same period, shown in minutes or hours.

The longer the driver takes at each delivery location, the greater the cost to the business in terms of driver wages. The time taken is a measure of the driver's efficiency, which is currently hidden within the efficiency variance above and it will be useful to isolate the time taken for this activity.

When reviewing performance, care will be needed to ensure that consideration is given to factors such as the distance from the vehicle to the location and the ease with which the driver can access the location. Not all locations will be the same and some factors will be outside of the control of the driver (for example, if there is nobody present at the location to accept delivery).

#### **Percentage of incorrect deliveries made**

This would be measured as the number of incorrect deliveries made in a period divided by the total number of deliveries made in the same period, expressed as a percentage. We would aim for this to be as low as possible.

This is an appropriate measure because incorrect items being delivered results in customer complaints and, if this is repeated, could ultimately lead to the loss of customers.

When reviewing performance, we need to consider where the responsibility for the incorrect order falls. If the cage was incorrectly packed at the distribution hub, then clearly the driver will be unaware of the problem. If, however, the driver picks the wrong cage to deliver, this is entirely their responsibility.

### **Kilometres travelled against planned route**

This would be measured as kilometres travelled by a driver in a day, week or month divided by planned route kilometres for the same period, shown as a percentage. If the percentage is above 100%, then it indicates that the driver took a longer route than planned and if lower than 100%, took a shorter route than planned.

Drivers have the authority to change the planned route and it is important that drivers are not consistently taking longer routes than necessary, as this will result in higher costs in terms of fuel and driver time. Similarly, if drivers are consistently finding quicker routes, then this could indicate an issue within the computer scheduling system.

When reviewing performance against target, we will need to be aware of factors outside of the control of the drivers such as road closures and diversions that were unknown at the time the route plan was produced.

### **Sub-task (c)**

#### **Total production cost of bread rolls**

The relevant cost of production will be the incremental costs incurred as a result of accepting the contract. These will include:

- The direct cost of raw materials used. Given that we will be making our regular products, the raw materials used will be in inventory and will need to be replenished. The relevant cost will therefore be the cost of replenishing inventory, which will be the latest raw material prices.
- The cost of direct labour used in production. We are told that overtime will need to be worked to accommodate the extra production and therefore the relevant direct labour cost needs to include the overtime premium that will be payable.
- The cost of variable overheads (for example, power costs) that will be incurred as a result of the extra production.

The irrelevant cost of production will be fixed production overheads, as these will be incurred regardless of the level of production and are therefore not incremental costs.

#### **Administration cost**

The relevant administration cost for this contract will again be any incremental cost that is incurred in the future. Based on the information given in Table 1, there does not appear to be any such cost.

In terms of management time, the cost of the 5 hours already taken is in the past and therefore sunk. For the 5 hours still to happen, whilst in the future, these hours will not generate an incremental cash flow because managers are typically salaried rather than paid an hourly rate.

### **Delivery cost**

The relevant cost of delivery will include the cost of the fuel used to deliver to the festival. Also relevant will be the additional cost arising from hiring additional vans and using agency drivers for normal deliveries. As identified above with the variances, agency drivers appear to be paid at a higher rate than our own drivers and therefore the difference between these two rates will be the relevant cost for the drivers.

The cost of hiring the additional vans will also be an incremental cost, as this will only happen as a result of accepting the contract. Costs associated with our own delivery vehicles such as maintenance may be relevant if they are incremental.

# CGMA OPERATIONAL CASE STUDY

## MAY & AUGUST 2025

### EXAM ANSWERS

## Variant 2

*These answers have been provided by CIMA for information purposes only. The answers created are indicative of a response that could be given by a good candidate. They are not to be considered exhaustive, and other appropriate relevant responses would receive credit.*

*CIMA will not accept challenges to these answers on the basis of academic judgement.*

### TASK 1

#### Sub-task (a)

##### What Chart 1 shows us

On Chart 1, the data points joining the dotted lines are actual sales of gluten-free bread products in Keeland each quarter, from the start of 2021 until the end of 2024. This is known as a time series, which is a series of data recorded over a period of time.

This time series clearly shows us that there is an overall increase in sales volumes over the 4 years of data. What is less clear though is how seasonality affects sales. The highest sales volumes are in Q1 for 2021, Q3 for 2022, Q4 for 2023 and back to Q1 for 2024.

The peaks in 2022 and 2023 are likely to be the result of events in the market rather than seasonality. For example, the Q3 peak in 2022 is likely due to Pico supermarkets stocking gluten-free products for the first time. Greater availability, together with the endorsement from the celebrity, appears to have increased demand. In addition, the peak in 2023 is likely influenced by our competitor launching a gluten-free range, again, increasing the availability of gluten-free products and therefore feeding demand.

The data points joining the solid lines are the centered 4-point moving averages which have been calculated from the actual sales data. First, a moving average is calculated based on 4 data points. So, the first moving average is the quarterly average of sales for Q1, Q2, Q3 and Q4 of 2021 and the second moving average is the quarterly average of sales for Q2, Q3 and Q4 of 2021 and Q1 of 2022 and so on. Because there are four quarters, these moving averages are then centered by averaging each two consecutive moving averages.

This 4-point moving averages line gives us an indication of the trend in sales and Chart 1 clearly shows that the trend is upward over the entire period, as each successive quarter has

a higher average than the previous quarter. The line also indicates that the increase has been relatively rapid over the period, although it does appear to be slowing at the end of the period.

### **Trend line and seasonal variations**

The most accurate method of determining a trend line is to use least squares regression analysis. Mathematical formulae are used to establish the equation of the line of best fit for the data. The trend line will be represented by  $y = a + bx$ , where  $y$  is the forecast sales volume,  $a$  is sales in the base period,  $b$  is the constant amount that sales increase or decrease by each quarter and  $x$  is the period number.

Alternatively, we could draw a line of best fit on Chart 1 based on the 4-point moving averages. This would be a straight line that visually best fits the data points. From this, we can then derive an equation for the line with  $a$  being sales volume at the point that the line hits the  $y$  axis and  $b$  being the gradient of the line.

Having established a trend line, we can then calculate the trend volume of sales for each successive quarter. The seasonal variations will then be calculated as the difference between this trend value and the actual volume of sales for that quarter. Each of the Q1 results will then be added together and averaged, same with Q2 and so on. This would give us seasonal variations on an additive basis.

### **Sub-task (b)**

A forecast of sales volumes for the gluten-free bread products market would be determined from the trend line and seasonal variations by extrapolating onwards from the period in the chart to determine total market sales for the quarters of the forecast period. From this, we could produce a forecast for GF@Halfpenny based on the percentage market share we would expect to capture.

One issue with a sales forecast produced in this way is that the data being used to determine the trend line and seasonal variations is for all gluten-free bread products. Whilst this is for our specific Keeland market, it is not clear if our range will incorporate all types of product available. It would be useful to see if data is available for each product line separately.

In addition, using a single trend line across the entire period is problematic. The solid lines based on the 4-point moving averages indicate that the trend has changed over the period. In the first two quarters charted, the upward movement is slight but seems to accelerate over the next four quarters and accelerates again over the following four quarters, before the rate of growth slows in the final quarter. A single trend line based on all of the data is likely to overstate the trend in sales, given the rapid growth during the period.

Linked to this, there are two events noted which will have had a significant impact on the availability of gluten-free bread products: the Picos supermarkets and FBH launches. As noted above, there is a clear impact in each quarter where these launches occurred, indicating that the increase in availability did seem to lead to an increase in demand. It's possible therefore that our launch could also have an impact on overall demand and this is not reflected in the current analysis, which is based on only the historic data.

Another issue with the forecast is that estimating our market share will be a best guess. This is the first range of gluten-free products that we have developed and, whilst we are known as expert bread makers, we will be including products that we don't currently make such as pittas and wraps. It may take a while to build brand presence in this more specific market.



Finally, as noted above, Chart 1 indicates that there are no clear seasonal variations. Peaks in sales seem to correspond more with events in the market rather than the seasons. Therefore, any seasonal variations are unlikely to be accurate and possibly best ignored in any forecast.

### **Sub-task (c)**

#### **Liquidity**

When investing funds, we need to consider the liquidity of the short-term investment, that is, how quickly the investment can be converted back into cash. We know that we may need the funds in 2 months' time to purchase a property and therefore this represents the maximum time frame that we would consider tying the funds up for with an investment. However, if there is potential that the purchase could happen earlier, we would need to ensure that we could convert the funds to cash relatively quickly.

Some investments (such as short-term bank deposits or money market deposits) typically have fixed settlement dates and therefore offer limited liquidity and flexibility. However, other investments such as Treasury Bills or Certificates of Deposit are marketable and therefore can quickly be converted back into cash through money markets. These types of investment, therefore, have high liquidity and will enable us to be flexible if plans change and the purchase of the property is brought forward.

#### **Risk**

When investing funds for the short term, we also need to consider the risk or safety of the investment, that is, the chance that the short-term investment may lose value. The funds that we are looking to invest are potentially necessary to fund the purchase of a property and, as such, it is vital that the capital value of the funds is maintained. These are not surplus funds that we can invest for speculation purposes, therefore a low-risk approach is most appropriate here.

The most risky type of investment we might consider is investing in equity shares on the stock market. Given the volatility of share prices this would be a very risky approach as there is a chance that we could lose capital value and, as such, this type of investment is usually not considered appropriate for the short term. A bank deposit account is perhaps one of the safest or least risky ways of investing the funds because we can expect to get our capital back plus interest. Alternatively, investing in government securities, such as Treasury Bills, is also considered low risk, because such investments are government backed.

#### **Return**

When investing funds for the short term, a final consideration is the return that we can earn from the investment. Typically, the lower the risk of an investment, the lower the return it will generate and vice versa; hence, risk is a key factor in how much return will be generated. In addition, the more liquid the investment, usually the lower the level of return. As noted above, given the situation, we will need to ensure that the investment is liquid and low risk, which will in turn determine the level of return.

We also need to factor in the administrative costs of investing, which will affect the overall profitability of the investment. Typically, marketable investments such as Treasury Bills will have higher administrative costs than bank deposit accounts because of the need to involve brokers.

## TASK 2

### Sub-task (a)

Chart 1 is a profit/volume chart which shows the relationship between total revenue and total profit at different levels of activity. Each line represents one of the three options for the production of GF@Halfpenny and is based on best estimates of sales volumes, sales mix, sales price, variable cost per unit and total fixed cost for the first 6 months of operation.

#### Fixed cost

Each line starts on the profit axis and this represents the total fixed costs for each option. The chart indicates that if all production is in-house (Line A), fixed costs for the 6 months will be around K\$8,500,000. If some production is outsourced (Line B), fixed costs will be around K\$7,000,000 and if all production is outsourced (Line C), around K\$2,500,000. There is a relatively small increase in fixed costs between Line A and Line B, which represents a step in production fixed costs from additional equipment needed to produce pittas and wraps.

#### Budgeted profit

Each line ends at the point which represents total budgeted revenue and profit. Chart 1 shows that for the same level of revenue (at around K\$25,000,000), producing all products in-house would give us the greater profit at around K\$4,000,000 and outsourcing would give us the lowest profit at just over K\$2,000,000.

#### Variable cost per unit

The slope or gradient of each line represents the weighted average c/s margin based on the budgeted mix of loaves, rolls, pittas and wraps sold. Line A (produce all products in-house) has the steepest gradient, which reflects the fact that it has the highest weighted average c/s margin of the three options. Line C (outsource all production) has the shallowest gradient and therefore the lowest weighted average c/s margin.

Given that budgeted mix and selling price are the same for all options, this means that the variable cost per unit is at its highest for outsourcing. This makes sense as we will be buying in the products from a third-party producer that will need to cover its fixed costs and make a profit.

#### Break-even position

The point at which each line crosses the profit axis is the break-even point for that option (that is, the level of activity at which we make neither a profit or a loss). Line C (outsourcing all production) has the lowest break-even revenue at around K\$13,500,000. Line B (producing loaves and rolls in-house and outsourcing pittas and wraps) and Line A (all production in-house) appear to have the same break-even revenue of around K\$17,250,000.

The outsourcing option breaks even sooner because of the significantly lower level of fixed costs with this option compared to the other two, despite the variable cost per unit being higher.

## Sub-task (b)

### Benefits

A benefit of this break-even analysis is that it gives us a visual representation of the break-even point, that is, the level of revenue required to cover our costs. From this, we can then determine the margin of safety, that is, the amount by which sales revenue could fall from the total budgeted sales revenue before a loss is made. For Line C (outsourcing all production), the margin of safety is around K\$11,500,000 ( $K\$25,000,000 - K\$13,500,000$ ). At the other extreme, for Lines A and B, the margin of safety is around K\$7,750,000 ( $K\$25,000,000 - K\$17,250,000$ ).

Given that this is a new range and there is significant uncertainty about the level of sales volume that will be achieved in the first 6 months, understanding the margin of safety is helpful. Chart 1 indicates that even for Lines A and B, which have the highest break-even point (and therefore the lowest margin of safety), the margin of safety is around 31% ( $K\$7,750,000 / K\$25,000,000$ ). This means that, assuming all other budget variables remain unchanged, sales revenue could fall 31% from the expected level before a loss was generated.

Another benefit of this analysis is that we have a visual comparison of the profit achieved for each of the three options at different levels of activity. It clearly shows us the relationship between fixed costs and contribution per unit and visually identifies the crossover points (that is, the level of activity where one option gives a greater level of profit than another at higher sales revenues).

Chart 1 shows that up until revenue of around K\$18,500,000, outsourcing all production (Line C) would generate the highest profit and after that point, producing all products in-house (Line A) would generate the highest profit. The analysis shows that having a mix of production outsourced and in-house (Line B) will never give us the highest profit, principally because the fixed costs required for the production facility are high regardless of the number of products produced.

### Limitations

A limitation of this analysis is that it is based on estimates that may not be accurate. GF@Halfpenny is a new range for us as we have never made and sold gluten-free bread before and we are still in the early stages pre-launch. One of the variables facing significant uncertainty is the level of fixed costs. If we produce in-house, we will need to set up a brand new gluten-free production facility, and the costs of running this are hard to predict at this time as we don't even have a property yet.

Linked to this, selling prices and sales mix are also likely to be highly uncertain. Given that this is a new range, we may need to offer discounts and, depending on how we do this, could influence sales mix. It is not clear from the chart which products have the highest c/s ratios, but if we ended up selling a greater proportion of the lower margin products, this will reduce the overall weighted average c/s margin and make each line shallower. This would increase the break-even points and lower the margin of safety.

Another limitation is that we are assuming that, for each option, total fixed costs and variable cost per unit are constant over the entire range of activity. Whilst we might expect marketing costs to be reasonably fixed, in reality, production fixed costs are likely to be stepped in nature as activity levels rise. In addition, there may be economies of scale (possible bulk purchase discounts) that could reduce variable cost per unit at higher activity levels. These are ignored in the analysis.

Similarly, we are assuming that selling price per unit is consistent across the range of activity. It may be that to achieve higher volumes, a discount is required, which would not be needed at lower volumes. Again, this is ignored in the analysis.

### **Sub-task (c)**

When deciding whether to outsource, a key factor to consider will be the supplier's ability to deliver a gluten-free product. Many people choose gluten-free bread products because they have an intolerance to gluten. Therefore, it is of paramount importance that there is no risk of contaminating the gluten-free product with gluten, as this could make consumers unwell. We would need to consider the safeguards put in place by the supplier to manage this risk and whether these are strong enough to support outsourcing rather than producing in-house where we will have control over production.

Another factor to consider is the quality of products. GF@Halfpenny is a brand new range that we have developed and if we outsource, we will need to ensure that the supplier has at least the same quality standards as we operate in our own production facility. We must also recognise that if we outsource, we lose control over production and therefore even if a supplier appears to have robust quality procedures, we will have no control over whether these are properly implemented

Linked to the quality point, we also need to consider the reliability of the supplier in terms of being able to deliver orders to us on time. This is a new range and it will be imperative that we have inventory available to satisfy customer demand and that the supplier has the capacity to increase production (potentially at short notice given the relatively short shelf life of bread products) should the need arise.

On a more positive note, outsourcing could potentially give us access to expertise that we don't currently have and this needs to be factored into the decision. The GF@Halfpenny range includes pittas and wraps, products that we don't currently make as part of our existing range. These products require different production techniques and specialist equipment. Therefore, outsourcing this production to a specialist bakery of such products would allow us to take advantage of this expertise and allow our own team to do what they know best.

### TASK 3

#### Sub-task (a)

The future costs associated with the app will include:

Royalties	We will pay K\$0.50 to Jo Fox for each subscriber to the app. This is a direct cost because it relates specifically to the GF@Halfpenny app. This royalty cost is also a variable cost because the amount that we will pay to Jo Fox varies directly with the number of app subscribers.
App provision platforms	We will pay an annual fee of K\$20,000 to each of the three app provision platforms. These fees are direct costs as they will relate to this particular app. However, these are fixed costs as the fee is a fixed amount of K\$20,000 each year and therefore not dependent on the number of subscribers or downloads.
Infrastructure services costs	The infrastructure for the app includes the servers which will host the app and deal with data storage and data delivery. This will be our own servers. Costs here will include any costs for upgrading and maintaining our servers and such costs are likely to be indirect in nature because they will relate to the servers as a whole and not to this specific app. They are also likely to be fixed in nature and not vary with the number of subscribers.
Administrative services costs	The app will be administered by our own IT team. We will be recruiting additional IT employees for this purpose. If these employees work exclusively on the app, then the employee costs will be a direct cost associated with the app. If the employees also perform other tasks within the IT Department, this will be an indirect cost. Such costs are also fixed in nature, as employee salaries will not vary in relation to the number of app subscribers.
IT support services costs	We will need ongoing technical IT support services for upgrades and bug fixes, which will be provided by the app developer. These will be direct costs as they will relate specifically to this app. For each bug fix or app development project, there may well be fixed elements (per fix or project) and variable elements based on the number of hours required.

#### Sub-task (b)

##### How to determine cost per subscriber of the app

To establish a cost per subscriber of the app, we will start with any direct costs per subscriber. This will be the K\$0.50 payable to Jo Fox for each subscriber. To this we add other direct costs per subscriber. This will be calculated as the total of the other direct costs over the lifetime of the app (for example, app provision fees and upgrade costs) divided by the number of subscribers over the lifetime of the app.

To this we then add the indirect cost of the app per subscriber. This in turn is calculated as the total of the indirect costs (for example, server upgrades and possibly IT employees) multiplied by the proportion of the total cost related to the app divided by the number of subscribers over the lifetime of the app.



## **Difficulties of determining this cost per subscriber**

### **Number of subscribers:**

GF@Halfpenny is a brand new range for us and we are still many months away from actually starting to sell the range, given that the production facility is not yet established. Therefore, it will be extremely difficult at this stage to determine how many subscribers there will be over the entire lifetime of the app. This is because, given that we have never sold gluten-free products before, there is considerable uncertainty surrounding how popular the range will be and therefore how many subscribers we might attract.

In addition, even if we could establish the number of people that might buy the range, given that products will be available at retailers as well as through the app, we don't know the proportions of each. Also, we don't know how long the app will be relevant for. New technologies could arise which make the app redundant or indeed we decide to stop the app earlier than intended.

### **Future costs:**

All of the costs identified above will occur in the future and whilst we know what some of these costs will be (for example, K\$20,000 a year for each app provision platform), it will be difficult to predict others. For example, future app developer fees will be dependent on the number of bug-fixes and upgrades required in the future and the complexity of these changes.

Similarly, it will be hard to predict future infrastructure costs in terms of future server upgrades or indeed how much administrative time will be required by our IT employees given that we haven't run our own app before.

### **Sharing of costs:**

We will need to determine an appropriate share of all of the indirect costs explained above and this will also be difficult to do. For example, the costs of upgrading our servers to support the app will benefit our business as a whole as well as the app, but it will be difficult to determine what proportion of the cost should be allocated to the app.

Similarly, if IT employees are working on more than the app, we will need to find a way to share out their salary costs between the various activities that they do. This could perhaps be done on an hours basis going forward, but this will need to be recorded and will potentially be different each month.

## **Sub-task (c)**

### **Recognition**

In accordance with IAS 16: Property, Plant and Equipment, property, plant and equipment are tangible items that are held for production, supply or administrative purposes and are expected to be used for more than 12 months. The property being purchased is to be used as a production facility and we expect to use it for more than 12 months and hence these criteria are being met.

Also, in accordance with the standard, the cost of an item of property, plant and equipment can be recognised as an asset if it is probable that the future economic benefits associated with that item will flow to the company and the cost can be measured reliably. Given that we

will use the property to make gluten-free products for sale, we will be gaining economic benefit from the property.

In addition, some of the expenditure has already been incurred and presumably we have reliable estimates for the expenditure yet to be incurred, therefore the cost can be reliably measured. Therefore, we can recognise a property asset as part of non-current assets in our statement of financial position.

### **Initially measured**

IAS 16: Property, Plant and Equipment states that an asset should be initially measured at cost. The cost of an asset is its purchase price (which includes non-refundable purchase taxes) and costs which are directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating as management intends.

Therefore, the amount that we can initially recognise as the cost of the property asset will be the K\$1,250,000 purchase price, plus K\$125,000 for property tax (on the assumption that this is non-refundable), plus K\$32,000 for legal fees (necessary to make the purchase), plus K\$78,400 building contractor costs and finally K\$5,600 building inspection fee. The building contractor costs are included because these are necessary and therefore directly attributable to being able to use the property as a production facility. The building inspection cost is a legal requirement and is necessary to allow the facility to be equipped for use.

### **Subsequently measured**

In accordance with IAS 16, all items of property, plant and equipment (except for land) are depreciated. Depreciation is the systematic allocation of an asset's depreciable amount (cost less any residual value) over its useful life. The depreciation method chosen should reflect the pattern of consumption of the benefits expected from the asset and depreciation should start on the date from which that item is available for use as intended by management.

Therefore, we will firstly need to establish how much of the property purchase cost of K\$1,250,000 relates to land and how much to the building, as only the building cost element will be depreciated.

The useful life of the asset is the period over which we are expected to utilise the asset. Given that we expect to relocate in 20 years' time, 20 years represents this period of utilisation. The depreciable amount of the asset will be the initially recognised cost less the cost of land less the expected residual value of the building in 20 years' time.

In terms of depreciation method, given that the benefits from the property are likely to be consumed evenly, the straight-line method of depreciation is most appropriate. Depreciation will start from the date on which the property asset is available for use as intended by management. This will be after inspection completion and therefore is likely to be from 30 September. Therefore, 3 months' worth of depreciation will be expensed to profit or loss for the year ending 31 December 2025 and this will reduce the asset value in the statement of financial position.

## **TASK 4**

### **Sub-task (a)**

#### **Sales price variances**

The favourable sales price variance for retailers means that we have sold GF@Halfpenny White Loaves at a higher price than the standard price during January. The standard price is after planned discounts and therefore the favourable variance means that the level of discounts given away to retailers is less than planned. It's possible that the sales managers have negotiated better deals with retailers than anticipated. Alternatively, the mix of retailers could be different than expected, with a greater proportion of small retailers and a lower proportion of large retailers, given that small retailers on average pay a higher price than large retailers.

The adverse sales price variance for app subscribers means that we have sold GF@Halfpenny White Loaves at a lower price than the standard price during January. This is due to the discount given in the month if subscribers committed to a 6-month subscription, as this was not factored into the standard. This indicates that a number of subscribers made this commitment during the month.

#### **Sales mix profit variances**

Retailers are our least profitable sales channel as the standard profit per loaf is lower than the weighted average. Therefore, the favourable variance for retailers means that, for the actual level of sales, a lower proportion was sold through retailers than we expected. Conversely, app subscribers are our most profitable sales channel because the standard profit per loaf is higher than the weighted average. Therefore, the favourable variance here means that, for the actual level of sales, we sold proportionately more to app subscribers.

Overall, the sales mix variance is favourable, which means that we made more profit as a result of this change in mix from our lowest profit sales channel to our highest profit sales channel. Given that this is a new range, it's possible that the standard mix is incorrect and that more consumers are happy to sign up to the app than we first anticipated. In addition, it's likely that the additional discount for committing to a 6-month subscription may have drawn more consumers to the app.

#### **Sales quantity profit variance**

The favourable sales quantity profit variance means that profit is K\$90,160 higher than budgeted as a result of selling more GF@Halfpenny White Loaves, in the standard mix, than the budgeted volume. As for the mix variance, this is a brand new market for us and it's possible that our original estimates for this market are understated and that more consumers are attracted to our gluten-free brand. It's also possible that the additional discount encouraged more consumers to sign up for our brand on the app.

#### **Overall performance**

Overall, during January, the impact of the total adverse price variance on profit of K\$59,024 is outweighed by the impact of the total favourable mix and quantity variances. This could indicate that the additional discount was effective at generating additional sales volumes,

although it will be important to see if this is replicated across all of the products and not just White Loaves.

### **Sub-task (b)**

#### **Number of new subscribers**

This would be measured as the number of brand new subscribers to the GF@Halfpenny app on a daily basis. This could then be charted on a rolling infographic to show the trend in the number of brand new subscribers over a length of time. Given that GF@Halfpenny is still a new range, we might expect the number of new subscribers to be relatively high to start with but then tail off. However, it is important to track new subscribers, so that if new subscriptions fall beyond our expectation, we are aware and can take action. For example, we could offer further discounts or look at how the app is marketed.

#### **Average monthly spend per subscriber**

This would be measured as the average monthly spend per subscriber to see how much subscribers are spending above the minimum monthly spend of K\$20. This is important because the app is our most profitable sales channel and the more a subscriber purchases, the higher our profits. Again, we can review this over time and take action if necessary to boost app purchases.

#### **Proportion of subscribers committing to 6 months**

This would be measured as the number of subscribers committing to 6 months divided by the total number of subscribers in a period, expressed as a percentage. If subscribers are committing to 6 months, this would indicate that they are happy with our GF@Halfpenny products and the higher the proportion of total subscribers doing this, the better from a brand loyalty point of view. There is a downside in terms of the discount given away, but this balances against the certainty of at least 6 months of sales.

### **Sub-task (c)**

In accordance with IAS 10: Events after the reporting period, the events on 16 January and 3 January 2026 are events after the reporting period. This is an event that happened after the year-end but before the financial statements have been authorised. As such, we need to determine whether these are adjusting or non-adjusting events.

An adjusting event is one that provides evidence of a condition that was in existence on the reporting date (which for us is 31 December 2025). A non-adjusting event is one which is indicative of conditions that arose after the reporting event.

The notification of the court case on 16 January is an adjusting event. The condition for this to happen existed at the year-end because we cancelled the contract on 20 December 2025, which is before the year-end. Our lawyers have advised that it is probable that we will need to pay damages of K\$22,000 and therefore we need to make an adjustment for this in the financial statements for the year ended 31 December 2025. This adjustment will be to increase expenses and increase liabilities for the amount payable, the effect of which is to reduce profit.

The sale of inventory on 3 January 2026 is also an adjusting event because this sale gives us evidence of the realisable value of inventory at the year-end. IAS 2: Inventories states that inventory should be measured at the lower of cost and net realisable value. Here, the net realisable value of the inventory is K\$1,000 less K\$320. The difference between this and the cost value of K\$12,300 should be charged to profit as an expense and the inventory value within current assets reduced by the same amount.



## CGMA OPERATIONAL CASE STUDY

MAY & AUGUST 2025

### EXAM ANSWERS

#### Variant 3

*These answers have been provided by CIMA for information purposes only. The answers created are indicative of a response that could be given by a good candidate. They are not to be considered exhaustive, and other appropriate relevant responses would receive credit.*

*CIMA will not accept challenges to these answers on the basis of academic judgement.*

#### **TASK 1**

##### **Sub-task (a)**

The 10% adverse independent changes mean that the selling price will fall, the cost of flour will rise and the volume of sales will fall. Each change will be considered separately.

##### **Selling price**

The reduction to the selling price will mean that the revenue from the contract will fall by 10%. The change to the selling price does not have an impact on anything related to our production process. We will continue to produce and sell the same volume as budgeted and at the same cost. Therefore, although the reduction in contribution and profit is the same as the reduction in revenue on an absolute basis, on a percentage basis, the 22% fall in contribution and the 30% fall in profit will be greater than the 10% fall in revenue. This is because revenue falls by 10% but the variable costs remain as before and therefore contribution is less and the fixed costs deducted to calculate profit will also be as before resulting in a smaller profit margin.

##### **Cost of flour**

The increase in the cost of flour will mean that one of the variable costs of producing will rise, although the others will not. Volume will not change. Materials are our largest variable cost and flour is the biggest of the material costs. It is therefore to be expected that a 10% rise in the cost of flour will cause our total variable costs to rise substantially but not by the full 10%. Consequently, we would expect contribution to fall but not by the same percentage as the increase in the cost of flour. Given that the volume produced and sold will not change because of the increase in the cost of flour, it is expected that fixed costs will not change. Therefore, the percentage fall in profit will be bigger than the percentage fall in contribution because of the unchanged level of fixed costs being deducted from a smaller contribution.

## **Sales volume**

The 10% reduction in volume will mean that we will produce and sell 10% less than originally budgeted. Given that we can scale back operations, the variable costs will all also fall by 10% and therefore contribution will fall by 10% too. If fixed costs had stayed the same as budgeted, it would have been expected that the fall in the budgeted profit would have been more than the 10% change in volume. This is because the budgeted fixed costs would be deducted from a smaller contribution and hence resulted in a smaller profit. But the 9% fall in profit is smaller than the 10% fall in volume and therefore the fixed costs must have reduced. This could be because less supervision or machine maintenance is needed because of the smaller volume being produced.

## **Sub-task (b)**

### **Point A**

This is the position we are in without the Gourmetopia contract. Output is limited by the demand for Rustic loaves. It is the only binding constraint. We have spare mixing and shaping hours. If we could increase demand for Rustic loaves, we could increase output to the point where mixing hours become a binding constraint. By scheduling more mixing hours, we could double the output of Rustic loaves from our current level to where shaping hours become a binding constraint, but we would have to increase the demand for the loaves. Each of those options would result in more profit as can be seen by being able to move the iso-contribution further away from the origin. Given that Rustic loaves were added to our product line in 2018, it seems unlikely that we would be able to increase demand to that extent in the short term.

Point A shows that we currently have spare mixing and shaping hours. The Gourmetopia contract would mean that we can utilise those spare mixing and shaping hours but, to do so in line with the terms of the contract, which state that delivery volumes must be met in full, would mean that we would have to reduce output of Rustic loaves.

### **Point B**

This is where we would need to be to satisfy the demand for Rustic loaves and the Gourmetopia contract. We cannot produce at that level by increasing just one of mixing or shaping hours. We would need to increase both simultaneously. Even if the contract volume was reduced by 40%, we would still not be able to satisfy both the contract and Rustic demand. If we could produce at B, this would earn the biggest profit as the iso-contribution line would be further from the origin but is not possible.

### **Point C**

Given the current levels of mixing and shaping hours, this would be the profit maximising combination of output for Rustic and Gourmetopia. This is determined by the two demand constraints, the mixing and shaping constraints, and the slope of the iso-contribution line. The slope of that line is determined by the relative profitability, as judged by contributions, of a batch of Rustic loaves and a batch of Gourmetopia bread.

The output levels at point C do not satisfy either level of demand. At this level, we would not meet the terms of the Gourmetopia contract and therefore it is not a viable option.

The gradient of the iso-contribution line shows that the Gourmetopia contract would earn more contribution than we currently earn from satisfying the full demand for Rustic loaves. It should be remembered that the contract is for 6 months only. Therefore, we should consider the effect on our relationship with our Rustic customers if we did not satisfy all their demand in the 6-month period.

#### **Point D**

If we scheduled more mixing hours, the optimal output would be to meet all the demand for Rustic loaves and some of the Gourmetopia contract. Again, this is not a viable option as the contract terms for Gourmetopia cannot be met.

#### **Point E**

If we had more shaping hours, the optimal production plan would be to meet the Gourmetopia contract and some of the demand for Rustic loaves. If we are not contracted to some of our customers to supply them with Rustic loaves, this could be a viable option. The impact on our customers and our relationship with them of reducing output of Rustic loaves to less than 50% of the current level needs to be considered.

Of all the options discussed, point E is the one that gives the highest contribution. Point B is not possible without simultaneously obtaining more mixing and shaping hours. At point E, the iso-contribution line would be at its biggest possible distance from the origin within possible feasible regions (assuming additional shaping hours) and satisfying the terms of the contract.

At point E, we would be operating at the current limit of our mixing hours and would have to schedule extra shaping hours. This extra strain on resources could cause control issues.

## **TASK 2**

### **Sub-task (a)**

#### **Enhancing planning**

Artificial Intelligence-driven (AI) predictive analytics can significantly enhance planning by analysing vast amounts of historical data such as Keeland market trends, weather patterns in wheat-producing countries (which impact wheat yields) and geopolitical events. This data can then allow us to forecast flour prices in our budget more accurately than with traditional methods. For example, machine learning algorithms can identify patterns and correlations that human planners might overlook, providing more reliable predictions over different time horizons that would enhance our ability to plan.

We can also use AI to run multiple simulations using different assumptions about future flour prices and forecast their effects on our budgets and profitability. This will enable us to be proactive in managing our costs. For instance, AI can simulate the effects of a sudden prices surge in flour, allowing us to stress test our ability to respond by putting in place forward purchasing or adjusting prices in our contract negotiations.

Utilising big data to identify ultimate customer demand, seasonality and competitor activity can then support AI in producing more accurate demand forecasts and in turn allow us to produce more accurate and up-to-date budgets. This will then allow us to optimise inventory levels of items such as flour, which will reduce the costs of financing our working capital whilst ensuring the risk of running out of flour is minimised.

#### **Strengthening control processes**

The strength of AI is that it can monitor local and global flour prices in the market in real time. This will allow us to detect price fluctuations. We can also include alerts to ensure we are notified when prices exceed certain levels. This information can be used to update existing budgets, allowing us to have real-time information about production as well as ensuring we take action to remediate any issues identified such as adjusting procurement strategies or looking for alternative suppliers to remain with budgeted production.

We can also use big data to analyse supplier performance, for instance, around historical pricing, delivery times and consistency of quality. We can use these to identify the most cost effective and reliable suppliers and move purchasing to them. We can also use AI to support us in contract negotiations as it can provide data-driven insights into supplier behaviour which may lead to more favourable pricing which would allow us to mitigate price overruns.

AI should also support our variance analysis and drive for continuous improvement by helping us to identify the root causes of variances in flour cost and use. This can be done by pinpointing data patterns which identify the deviation of actual costs from budget such as unexpected changes in supplier pricing or demand. These can then form the basis for updated budget figures ensuring budgets are continuously refined and align with real world conditions.

### **Sub-task (b)**

### **Time taken for daily output percentage**

This is calculated as time taken divided by expected (standard) time and then expressed as a percentage. This would show how efficient an operation has been. The KPI could be for each department and for each job. Identifying areas/jobs that have taken more time to do will allow us to investigate and hopefully find the reasons for the extra time and therefore extra cost of production.

### **Daily output percentage**

This measures the volume of output as a percentage of the planned output for each day. Again, this could be by department or process. The KPI should be 100%. Lower will mean that we have not met our customers' needs and higher will mean that we have overproduced and thereby incurred excessive costs given the perishable nature of our output.

### **Daily capacity utilisation**

This is calculated as capacity used (for example, actual hours that machinery was running) as a percentage of the capacity available (machine hours available). This KPI will show how close we are operating to available capacity in each department. If the KPI is close to 100%, we need to ensure that everything is running smoothly and that there are no unexpected problems, as a reduction in throughput for this department could be a potential bottleneck. If the KPI is low, it could indicate that we have spare capacity or there has been a problem in that department or with scheduling.

### **Sub-task (c)**

Adapting a more aggressive working capital policy would involve reducing the value of different elements of working capital within the business. For example, reducing the days outstanding for accounts receivable. This will lower the amount of financing required and reduce costs, but it does have risks.

### **Lower inventory levels**

Due to the nature of our product, we dispatch all baked loaves to customers almost immediately and so have a limited inventory of finished loaves, therefore there is little we can alter in this regard. However, with an aggressive policy we could look to reduce raw material inventory levels; for instance, we only use an average of 6 silos of flour a day, but all 10 silos are full. We could fill just 7 silos leaving three silos empty. This would reduce the cost of inventory held and therefore the amount of interest to finance this cost. However, 6 silos are an average and the risk is that we may be unable to meet an unplanned request for additional loaves from a customer if we only hold 6 or 7 silos of flour. Especially as there is a 2-day lead time between order and delivery of additional flour supplies. Therefore, the possible reduction in the cost of financing raw material inventory would need to be assessed against the potential loss of profit and the harm to customer relationships and future sales over time from not being able to meet an order.

### **Accounts receivable**

We could also look at reducing credit terms for customers so that money is received more quickly, which would increase our cash balances or reduce our overdraft depending on where we are in the month. This could be done by reducing the amount of credit we allow each customer from our current average of K\$50,000. The effect of this is that customers would have to pay more frequently to ensure they do not breach their credit limit and deliveries are not halted. The same effect could be achieved by reducing the amount of time we allow customers to pay so we could reduce our longest payment terms from 60 days to say 45. Both ideas could lead to a one-off positive improvement in cashflow which would reduce working capital requirements and therefore costs. However, the stricter terms may lead to customers moving to other suppliers if our credit limits or terms become less attractive than others in the industry, which are on average currently 60 days. We may also need to offer discounts for prompt payment which would potentially reduce margins, indirectly increasing the cost of financing. We should also ensure that those customers who exceed their agreed credit terms form part of a robust collections process.

### **Extending supplier payment terms**

We could look at extending our payment terms with suppliers to delay cash leaving our account. This strategy theoretically will improve our short-term liquidity by increasing supplier days from our current 25 days to the maximum available to us. However, this may not be totally successful as we may be paying early to obtain supplier discounts which may be withdrawn if we take longer to pay. We may also be perceived by suppliers as a higher-risk company, which may also affect credit limits for instance, which may drive up the cost of paying suppliers. We should also consider the wider context in this area, which is that we already have 5 days longer terms than the industry average of 20 days so it is unlikely we can obtain better terms with alternate suppliers.

### **Reduced overdraft facilities/cash balances**

We need to assess any potential changes to our working capital provision considering the cost of our overdraft. Whilst we would hope overall to see a reduction in the level of overdraft used or more days in the month when we have a positive cash balance under a more aggressive working capital policy, we should remember that there may be occasions when a large customer doesn't pay, or we have an unexpected expense. Should those additional demands on cashflow push us above our authorised overdraft level, then our cost of finance would rise dramatically to 23.5%. We should also remember that an overdraft is repayable on demand and subject to 6 monthly renewals and, as such, it is an unstable form of financing and therefore riskier.



## **TASK 3**

### **Sub-task (a)**

#### **Expenditure variance**

This is the difference between the actual and budgeted expenditure on fixed production overheads for the Baking Department for the 4 weeks to 30 September. The K\$130,769 adverse variance indicates we spent more than budgeted for this period. The reason for the higher spending is likely to be due to the additional production from the Gourmetopia contract, leading to a step up in fixed overhead. This includes the cost of additional maintenance checks (of which there was one in September) and the cost of the extra supervisors.

The expenditure variance simply shows a change in expenditure; it does not tell us anything about performance.

#### **Capacity variance**

The capacity variance is the difference between the actual machine hours worked and the budgeted hours valued at the absorption rate. The budgeted hours were set at the start of the year. The favourable variance shows that the machines (ovens in the Baking Department) worked more hours than we originally thought they would. We are told that the departments expected to work at 90% utilisation before the Gourmetopia contract, so with the inclusion of the extra production we would have expected a favourable variance. The extra workers employed could mean that it was possible to schedule extra shifts and thereby run the ovens for longer. Also, the budget for the period would have been for a budgeted mix of Halfpenny loaves. This mix may have changed for our existing loaves but has certainly changed because of the introduction of Gourmetopia's own brand of bread which takes less time to bake.

In terms of performance, this variance tells us the difference between the budgeted oven hours for the period and the actual oven hours worked. It offers no insight into what bread was produced or the efficiency of our ovens or workforce.

#### **Efficiency variance**

The fixed production overhead efficiency variance is the difference between the actual machine hours worked and the standard machine hours needed to produce the output, valued at the fixed overhead absorption rate. Using machine (oven) hours as the basis of the overhead absorption rate, it is focused on how well we have used the ovens. It compares the hours that the ovens have been running to the standard hours needed for the actual output. As such, this variance offers the best insight into operational performance in terms of the efficiency of oven hours during the period.

The adverse variance of K\$56,099 means that the ovens ran for more hours than they should have done to produce the number of loaves we did during the period. The variance looks at the actual output and converts that to standard hours and then compares this to the actual hours the machines ran to produce that output. Therefore, any changes to the product mix, such as introducing Gourmetopia's own brand of bread, have no direct impact on this variance. It is surprising to see an adverse variance here, especially after the extra maintenance work. Reasons for this variance need to be identified and investigated.

### **Sub-task (b)**

The CGMA cost transformation model should support us in optimising our costs, improving efficiency and maintaining profitability, considering rising prices of flour and electricity and more generally rising prices in the Keeland economy, which may lead to increased financing costs with a rise in interest rates.

### **Ensuring products are profitable**

We will need to ensure that we identify which of our customers is the most profitable. This could be done by segmenting them in terms of profitability, not only including in this, profit from sales of bread but also, for instance, the finance cost of delayed payments where applicable. However, it is not as simple for us to just focus on customers who produce the highest margin, such as Rustic customers. This is because a lot of our profit is based on volume sold. Therefore, we need to balance both margin and volume. We should, however, look to identify any loss-making customers. By maximizing returns and not trading with loss-making customers, we can look to offer more competitive pricing to our remaining customers. This may require a cultural shift to embed cost consciousness as well as a reward system for new good ideas.

This analysis to find the highest profit can also be extended to our product mix to ensure that we focus on the most profitable products. We may also consider reducing the variety of bread produced, if we find that a particular product, for instance, White bread, has a low margin. However, as this is a high-volume product for us, we need to consider both volume and margin.

### **Understanding cost drivers**

We should also consider what factors drive costs, so we can optimise the baking and delivery process to reduce energy consumption in terms of electricity and waste. For instance, we could assess if the ovens were being used at peak efficiency in terms of batch sizes. We should also assess our production practices to ensure that we are minimising overproduction and raw material spoilage. We should also look to negotiate better terms with existing suppliers, find new suppliers of the same quality, or potentially form partnerships with local suppliers to reduce costs.

As well as looking at raw materials and processes, we should also be considering if we can leverage technology to aid cost efficiency and new products. We can look at this in terms of 3D bread quality x-rays for instance, to ensure there are no large holes which affect quality, or vacuum cooling chambers to reduce waste.

### **Maximising value from new products**

When developing new bread products, we should look not just at developing unique products to differentiate us from the rest of the bread industry, but, rather, we should assess the profitability of our new breads before we begin production to ensure that they are designed to appeal to the widest customer base possible or can be adapted to suit different markets.

### **Cost conscious culture**

It may also be helpful to create cross-functional teams, for instance, between proving and baking as well as finance and procurement to ensure that the process of cost management is holistic.

The introduction of cost initiatives needs to be supported to ensure that they align with our business goals and are managed effectively. For instance, we may need to look at tightening non-essential expenditure such as marketing or administration costs. We would also need to implement regular monitoring through key performance indicators (KPIs) to ensure that the cost reduction measures are achieving the desired outcomes. This cost transparency may have the benefit of demonstrating to customers that we are looking to be effective in our cost control, which may build stronger customer loyalty.

### **Managing the risks from a cost-conscious culture**

However, as a business, we need to be aware of what may prevent us from achieving our business objectives and cost transformation. Whilst new technology will allow us to reduce our costs, we need to ensure that there are no adverse consequences of introducing it. For example, if quality or taste is adversely affected due to the introduction of technology, this may affect customer satisfaction. To avoid this, it is important for us to embed risk management techniques into our processes.

### **Considering the environmental impact**

We can also look to increase our use of sustainable practices to ensure long-term resilience of our products by the introduction of new local organic suppliers for flour for instance, which would reduce chemical fertilizer use and reduce transport miles while having no impact on recipes but enhancing brand reputation. Whilst such raw materials may be more costly, they may also attract customers who are more willing to pay for such sustainability, which may support our profit margins. We can also look to incorporate eco-packaging into our products and remove single-use plastics for instance, which may enhance our image and attract a premium price.

## **TASK 4**

### **Sub-task (a)**

#### **Oven B**

The flooded oven has been destroyed and cannot be used, and therefore it is an impaired asset under IAS 36. The recoverable amount of the oven is the higher of its realisable value after selling costs (of K\$25,000) and its value in use (which is presumably nil given that it has been destroyed). Therefore, because the oven's carrying amount of K\$350,000 is higher than its recoverable amount of K\$25,000, there is an impairment.

The impairment loss of the difference between the oven's carrying amount and its recoverable amount should be recorded as an expense in the statement of profit or loss at the point of impairment. As the oven has effectively been scrapped on 31 December 2025, on this date, there will be a disposal of the asset, and the asset will be removed from the statement of financial position. The profit or loss on disposal will be nil (K\$25,000 proceeds of sale – K\$25,000 carrying amount).

#### **Replacement oven**

We should recognise the new oven in the financial statements as an item of property, plant and equipment, as we can measure its cost reliably and will derive economic benefits from the oven.

The oven will need to be initially recognised at its cost. However, there are several adjustments to the purchase price which will need to be made to reflect its cost accurately. Included in the cost value will be any amounts attributable to getting the oven ready for use. Therefore, the K\$25,000 installation costs and testing costs of K\$5,000 should be added to the cost of K\$630,000 of the oven.

In respect of depreciation, this will be calculated on an ongoing basis in line with our depreciation policy for plant and equipment, with the amount charged against profit or loss as an expense. However, as the oven was only installed on the 20 December, the first month of depreciation will be January 2026 and this will be in next year's financial statements.

### **Sub-task (b)**

IAS 10: events after the reporting period deals with events which occur after the reporting period, in this case, the year to 31 December 2025. Gourmetopia's liquidation occurred on 4 January 2026, so it falls within the remit of IAS 10. IAS 10 categorises events into adjusting and non-adjusting. Adjusting events are those which provide additional evidence of conditions that existed at the year-end, whilst non-adjusting events are those which have occurred since the year-end.

#### **Outstanding invoices**

Gourmetopia's liquidation is further evidence of the customer's poor financial condition at the year-end and therefore this would be an adjusting event which would require us to amend the financial statements. However, we would only look to write off the amount of K\$223,000 in the financial statements for the year ended 31 December 2025, as this amount is the only amount outstanding at that date. The amount of K\$300,000 should be written off in the financial statements for the year ended 31 December 2026. Whilst the amount of K\$300,000 is not an

adjusting event, if it was felt to be material, an estimate of the financial effect of the event should be disclosed in the financial statements as a note.

### **Finished bread not collected**

The inventory which was sold for animal feed as it was not collected by Gourmetopia and has passed its sell by date, is also an adjusting event as the original production was completed on 30 December 2025, which is in the current financial year. IAS 2 states that inventory should be measured at the lower of cost and net realisable value. Here, the net realisable value of the bread is K\$2,000. The difference between this and the cost of the bread of K\$21,357 should be charged as an expense to the statement of profit and loss for the year ended 31 December 2025.

### **Sub-task (c)**

How Schedule 3 is used to choose the level of output will be determined by the attitude of the person making the decision in the Production Department.

#### **Maximax criterion**

The maximax criterion is where the decision maker takes an optimistic approach and selects the Rustic bread production level which maximises the payoff achievable. This would be level 3, which generates the highest contribution of K\$22,354.

#### **Maximin criterion**

Under this criterion, we would select the option which maximises the minimum pay off achievable. Here, we will compare the minimum contribution for each level of production and choose the highest. For level 1, this would be K\$3,514; for level 2, this would be K\$(3,150) for level 3, this would be K\$(11,719). The highest of these minimums and therefore the choice of the Production Department using this approach would be level 1 production.

#### **Minimax regret criterion**

The regret table forms the basis of the decisions made under the minimax regret criterion. The amounts are calculated by considering the returns under each level of market demand. For low demand, level 1 production produces the highest net contribution. The difference between the contribution for each of level 2 and level 3 production compared to level 1 is then calculated. This calculation is repeated for each set of market conditions and the figures are then used to make the decision according to the criteria.

Using this criterion, we are looking to minimise the maximum regret under the alternative selected. Regret here is the opportunity loss from the wrong decision, as we are looking to minimise the effect of making a bad decision. Again, this is a pessimistic approach to the decision being made.

The table shows the regret in terms of contribution for each level of production. In this table, we will look at each column and compare the highest amount in each. So, for production level 1, it would be K\$14,832; for production level 2, K\$7,466 and level 3, K\$15,233. We would then choose the lowest of the three, which would be production level 2.

### **Conflict arising**

It is possible that there are different perspectives within the Senior Management Team (SMT) and that this could lead to conflict. Each method chooses a different alternative, and therefore

the final decision made will depend on the optimistic or pessimistic basis of the decision makers at the time of the decision.



# CGMA OPERATIONAL CASE STUDY

MAY & AUGUST 2025

## EXAM ANSWERS

### Variant 4

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*CIMA will not accept challenges to these answers on the basis of academic judgement.*

#### SECTION 1

##### **Credit application from Organica**

##### **The issues we should consider when granting credit to Organica**

When giving credit to new customers, we need to look at the amount of credit and the period given to pay. We need to assess Organica's creditworthiness by looking at its financial health through financial statements and payment behaviour as well as looking at general economic conditions now, and in the future, to assess the potential impact of issues such as inflation.

We will also need to consider our risk tolerance as we are effectively lending money to Organica. We need to consider the potential risk of an irrecoverable debt or cashflow issue if we set the limit too high and then Organica either delays payment or does not pay. We need to balance this against setting the limit too low and risking a breakdown of our relationship with Organica if it cannot buy the amount it needs. Even though Organica has been attracted to us by U-Bake, it could go to our competitors if terms are not suitable.

##### **Usefulness of information sent by Organica to support its application**

The credit reference agency report includes the fact that it has downgraded Organica's credit rating from A- to B+. This downgrade could suggest a greater risk of future irrecoverable debt, which would be useful to know when setting a credit limit. However, we would need additional information about Organica's performance to make a final decision. Sales forecasts could be requested from Organica's management and would help with this part of the decision as would forecasts for the market Organica operates

in. Organica is currently at the lowest rating level that the Reference Agency would recommend granting credit too. It is important that we assess the likelihood of a downturn in the economy and/or Organica's own performance further lowering that rating in the future.

Whilst we can take comfort from the fact the trade reference from Pure Bakery is provided by a third party, we don't know the value of the credit Organica applied for and how it relates to K\$40,000. Additionally, the credit limit granted by Pure Bakery could have been affected by its size and may reflect Pure Bakery's capacity for loss and not Organica's creditworthiness. As the reference is more than 2 months old, the cashflow position for Organica could have changed in the intervening period and a more up-to-date reference should be requested.

### **Relevant costs for subcontracting decision**

To be relevant to decision making, individual costs must be incurred in the future and capable of changing as a result of the decision. They must also represent actual cashflows as opposed to accounting adjustments and only the incremental or differential costs incurred because of taking the decision are relevant.

### **Market research report**

The cost of the market research report is historic. It is a sunk cost and cannot be recovered whether the internal promotional campaign goes ahead or not. Therefore, this cost is not relevant for decision making and should not be included in the total.

### **Fixed overhead cost: to date**

As the campaign does not incur any additional overhead cost, there is no evidence the level of overheads will change because of the project. K\$7,000 has already been charged to the campaign, but this is not relevant for decision making. The charge is based on the fixed overhead absorption rate. This is not a cash flow.

### **Fixed overhead cost: future**

Future charges based on the overhead absorption rate are not relevant. The only relevant overheads will be incremental overheads that will be incurred specifically for the campaign.

### **Food photographer**

As the photographer has not yet been paid, this is a potentially relevant cost. However, the relevant cost is not the total amount of K\$10,000, rather it is 40% of the fee. This is a future cashflow which will only be incurred if the internal promotional campaign goes ahead. The 60% of the fee already committed to is irrelevant to this decision.

## **Building rent**

Internal charges for rent do not result in a net cash flow for Halfpenny and are therefore irrelevant to this decision. However, the fact that, if we don't use the building, it could be rented to an external company, means that there is a potential opportunity lost of K\$2,500 per month. This would therefore be a relevant cost if an external company was found.

## **Two non-financial factors**

### **Team morale and development**

Running this type of high-profile campaign using an internal team may bolster team morale. Team members would have the opportunity to take on new skills and gain recognition within Halfpenny, as well as fostering a sense of accomplishment and ownership for U-Bake, which may support its success in the longer term.

### **Consistency with long-term strategy**

The internal team may already have a better understanding of our long-term goals and strategy which would support a closer vision between this campaign and the longer term. As opposed to the external company who may have a shorter-term view and concentrate solely on U-Bake as opposed to placing U-Bake into our wider strategy for all our bread products.

## SECTION 2

### **Throughput accounting and production prioritisation**

Throughput accounting (TA) seeks to maximise profit by optimising output after identifying constraints and bottlenecks in the production processes. For the next 2 weeks, output is reduced to 80% of that budgeted because of the problem with the drive mechanism on the conveyor belts in the Shaping & Proving Department. This means that we have a potential bottleneck in the Shaping & Proving Department.

There is no point in the Mixing & Kneading Department producing more dough than the Shaping & Proving Department can process, because it would have to be thrown away and this unnecessary cost would erode profit. Therefore, the Mixing & Kneading Department should only process the amount of dough that we know we can cope with in the Shaping & Proving Department.

Having identified the Shaping & Proving Department as the bottleneck, TA then seeks to optimise the use of the time available there. This is like the traditional method of limiting factor analysis which prioritises products according to their contribution per hour of the scarce resource which, in this case, would be shaping & proving hours. However, TA defines throughput contribution as selling price minus the cost of materials. It views all costs except materials as being fixed.

The ratio “return per Production Facility hour per batch” shows the amount, in K\$, that a batch of loaves earns per hour that it spends in the Shaping & Proving Department. It is calculated as the throughput contribution (as defined by TA) divided by the time a batch of loaves spends in the department. The shaping & proving hours are used as the “facility hour” due to the activity for the entire factory being limited to the time available in the Shaping & Proving Department.

The ratio “Production Facility cost per hour” shows the amount, in K\$, that it costs per hour to run the facility. It is the cost per hour of producing. TA defines the facility cost as all production costs except the cost of materials. As opposed to traditional costing, TA views all production costs regardless of the traditional definitions of direct or indirect and variable or fixed as being fixed and the total of these costs is the facility cost. As explained previously, the bottleneck in the Shaping & Proving Department determines the level of activity in the entire facility.

The ratios show that for each of the four types of loaf, the return per hour is more than the cost per hour and that all the four types are worthy of being produced. But for the 2-week period, we cannot produce all the budgeted output and therefore we need to give priority to the loaves in order of their return per Production Facility hour. The order for production would be Rustic, Multi-seed, White and Wholemeal. We would therefore plan to produce enough Rustic loaves to meet this demand and then Multi-seed and so on until the available shaping & proving hours have been used. There is no point in using the Mixing & Kneading Department to its capacity because the Shaping & Proving Department would not be able to process all that output.

TA considers the problem from a financial perspective only. There are other issues to consider such as would it be better to satisfy the needs of specific customers by

satisfying their contracts rather than optimising our own profit.

### **The suitability of throughput accounting for production planning at Halfpenny**

Throughput accounting focusses on making the most effective use of the bottleneck resource. For our short-term problem, this is the time available in the Shaping & Proving Department.

It assumes that there is only one scarce resource and is like a limiting factor approach. However, there is a major difference. TA classifies all costs except for materials as being fixed.

Looking at our budget, other than materials we have few variable costs. And it can be argued that the low level of variable costs is being reduced even further by the new contracts for the factory workers, making our labour costs become largely fixed. Therefore, the difference between optimising output in the short term by TA and traditional limiting factor approach is minimal.

If we have more than one constraint/bottleneck, we could not use throughput accounting and would need to use something else such as linear programming.

In longer-term scenarios such as our annual budgeting process, our production capabilities would be viewed against the forecasted sales demand and the resources that would limit the scale of our output would be identified. Ways to overcome any constraints, such as purchasing new machinery, would need to be evaluated.

### **Potential benefits for Halfpenny of using big data and AI when setting sales budgets**

By analysing demand fluctuations for bread, competitor prices and production costs, AI may enable our sales team to initiate tailored discounts, rebates or promotions to our supermarket customers that they can then pass on to shoppers. For instance, identifying retail customers who do not live close to a supermarket and may wish to use U-Bake to reduce the number of shopping trips.

Machine learning can also be used to analyse information such as social media, online reviews and customer feedback on our bread which will help reveal emerging consumer preferences. This should allow us to innovate future new bread products as we have done with U-Bake and refine existing recipes, such as our Rustic bread.

It may be that in the future cafés and small convenience stores will replace supermarkets as the dominant place to buy bread due to the increase in homeworking. Both types of outlets would likely buy bread from wholesalers, who in turn would be our customers. This would be a new market and distribution channel for us and would require us to be able to forecast changes in buying patterns and tastes and be able to switch production quickly.

Whilst we have underlying long-term contracts with supermarkets, these are supported with shorter-term quantities of bread required. The use of AI would potentially allow us

to try to predict short-term order quantities and variations on orders, allowing us to respond more quickly to customer needs. This ability to be flexible could strengthen relationships with our customers, especially the major supermarkets.



## SECTION 3

### **Mixing & Kneading Department fixed production overhead variances**

#### **Expenditure variance**

This is the difference between the actual expenditure and budgeted expenditure on fixed production overheads for the period. This was K\$14,038 adverse, which means that we spent K\$14,038 more for the period than we had budgeted to spend. Reasons for the extra spend will include:

- The cost of the additional supervisors hired due to a new protocol for cleaning.
- Additional stepped fixed costs as a result of the department now running at 90% utilisation. Running for longer will have incurred extra stepped fixed costs, for example, production supervisor salaries.

The expenditure variance does not tell us anything about production performance, it simply shows the change in expenditure.

#### **Volume variance**

The volume variance is the difference between the budgeted fixed production overheads for the period and the amount of fixed production overheads absorbed by the output in the period. The variance of K\$52,022 favourable tells us that we produced more in terms of standard hours of output than we budgeted for. The overheads absorbed are based on the standard machine hours for the output not the actual machine hours used. Each standard machine hour of output will be valued at the absorption rate of K\$114.99 per machine hour.

Given that we are now working at 90% utilisation as opposed to the budgeted 80%, it is to be expected that output will rise and hence the standard machine hours output will rise and there would be a favorable variance. Another factor to consider is the mix of products produced during the period and their associated standard hours, which will affect the level of overhead absorption. Also, we have now started to produce U-Bake, and this takes longer to mix and knead than our other breads.

The volume variance can be broken down into its component parts, the capacity and efficiency variances, for more details about production performance.

#### **Capacity variance**

The capacity variance is the difference between the actual machine hours worked and the budgeted hours valued at the absorption rate. The favourable variance shows that we worked more hours than we originally thought we would have available. We are told that the departments are now working at 90% utilisation as opposed to the budgeted 80% when the budget was produced at the start of the year and therefore, we would have expected a favourable variance. Also, the budget for the period would have been for a budgeted mix of products. This mix could change for our existing products but has certainly changed because of the introduction of U-Bake to our product offerings.

In terms of performance, this variance tells us the difference between the budgeted machine hours for the period and the actual machine hours worked. It offers no insight into what was produced or the efficiency of the machines or workforce. It focusses on the actual hours that the machines were running for, compared to the budgeted machine hours for the mixing and kneading machines for the period.

### **Efficiency variance**

The fixed production overhead efficiency variance is the difference between the actual machine hours worked and the standard machine hours needed to produce the output, valued at the fixed overhead absorption rate. It is focused on, given the use of machine hours as the basis of the overhead absorption rate, how well we have used the machine hours. As such, it offers the best insight offered by the fixed production overhead variances into operational performance in terms of the efficiency of machine hours during the period.

The variance of K\$34,498 adverse means that the mixing and kneading machines ran for more hours than they should have done to produce what we did during the period. Given that the variance compares like with like in the sense that it looks at the actual output and converts that to standard hours and the actual hours the machines ran to produce that output, any changes to the product mix have no direct impact on this variance. However, during the period U-Bake formed some of the output and the difficulties we have been experiencing with this being a new product will have impacted the number of hours that the machines ran for.

### **Feed back and feed forward control**

#### **The difference between feed back and feed forward control**

Feed back control in budgeting is a reactive approach that involves comparing actual financial performance against the budget, after the fact. So, for instance, comparing the monthly standard price for flour to the actual price for flour through variance analysis. If we found that we had spent more than standard, this may lead to action to correct the price discrepancy so that it doesn't happen again. Feed back comparisons do not always have negative results; for instance, bread sales may have been higher than anticipated which would be positive and, in such cases, we will attempt to ensure we continue with the factors which have led to the increase. The key though is that action is only taken after the event.

In contrast, feed forward control is used as a proactive approach which tries to help us to anticipate potential variances between targets for the period and the forecast actual results. So, for example, it may involve analysing external factors to anticipate changes in the cost of packaging say and adjusting to achieve the desired outcome where possible. This may include strategies to lock in prices or bulk buy for example.

## **How feed forward control reports may help control production at Halfpenny**

The key advantage of a feed forward control report lies in helping us to control production in our factory by providing early insights into potential budgetary and production challenges we may be facing. This then allows our managers to take pre-emptive actions to stay on track. For instance, a feed forward control report may indicate that market research has identified an increased demand for some of our loaves due to an upcoming national holiday. Feed forward can anticipate this, ensuring machines are effectively utilised and labour and raw materials reallocated before the national holiday, so that the anticipated increase in sales can be met.

At an operational level, feed forward control can be used to proactively meet targets and deadlines. The output for each day should be signalled in each department and if for any reason it is thought that output will not be as planned (by projecting to the end of the shift and thereby providing feed forward, to compare the anticipated output with the target), then action can be taken to rectify the situation. This is feed forward and is better than waiting until the end of the shift or period and then comparing actual output with the target output. For example, the feed back provided by the variances for the period ending 30 September was due to be discussed on 7 October. This is of no use for operational control in a real-time environment that we have in our company.

By integrating feed forward control reports into our budgeting and production processes, they should allow us to better manage costs and optimise resource allocations by being proactive to ensure we can meet financial and production targets without unexpected surprises.

## SECTION 4

### **Damaged assets**

An impairment occurs when the recoverable amount of an asset is below its carrying amount. The recoverable amount of an asset is the higher of its fair value less costs of disposal and value in use (which is the present value of estimated future cashflows arising from the use of the asset).

### **Freezer unit**

The freezer unit has a carrying amount of K\$150,000 in the financial statements. The freezer unit has been written off and therefore its value in use is nil. It can be sold for recycling for K\$4,000, so this is its fair value less costs of disposal and therefore recoverable amount. The asset needs to be written down to this value and the difference between the carrying amount and K\$4,000 should be recorded as an expense in the financial statements as it is not covered by insurance. If the asset is sold before the year end, we will then de-recognise the asset and record a loss on disposal of nil, assuming that the sale proceeds end up being K\$4,000.

### **Freezer room**

The freezer room itself is going to be repaired at the insurers expense in December. Therefore, it will be able, once repaired, to be used to generate future cashflows for the business. We will also not incur any cost for the repairs. For this reason, the asset does not fulfill the requirements of an impaired asset and should continue to be recorded in the financial statements at its current carrying amount and depreciated as normal, assuming there are no amendments to its useful life once repaired.

### **Inventory**

Inventory should be valued at the lower of cost, K\$9,200 and realisable value of K\$0. Therefore, the inventory will need to be written down and this charged to profit or loss. The cost of K\$2,000 to dispose of the bread in line with health and safety legislation will be included in the statement of profit or loss as an expense.

### **New freezer unit**

We should recognise an asset when we can measure its cost reliably and know that we will receive the economic benefits from the asset. Further, it will be classified as an item of property, plant and equipment if the asset is tangible and will be used for more than 12 months for productive purposes. The new freezer unit meets all of these criteria and therefore will be recognised as an asset.

When recognised, the new freezer unit has to be measured at cost. Cost includes purchase cost (net of discounts and non-refundable taxes) and any costs which are directly attributable to getting the asset ready for its intended use. Therefore, the asset will be initially measured at its purchase cost of K\$153,000 less the discount of

K\$4,000 plus the delivery, installation and safety certificate costs, which are all necessary to get the freezer unit ready to be used.

The asset will be depreciated from the date that it is available for use. The safety certificate will be required before it can be used and therefore depreciation will commence from 12 December.

### **Performance measures for individual sales team members**

#### **Sales revenue generated per team member per period in K\$**

This would be calculated as the sales revenue generated by each individual team member over a specified period. This measure relates directly to an individual's ability to close deals and drive revenue and therefore their ability to contribute to Halfpenny's success. High sales revenue suggests effective selling techniques and potentially cross selling of different bread types into one client.

#### **Number of new customers acquired in the period**

This would be calculated as the number of new clients signed up by an individual team member over a period. Growing sales requires new clients to expand our customer base. It also indicates the effectiveness of individuals in outreach and client engagement.

#### **Client retention rate percentage**

This would be calculated by the number of clients, such as supermarkets for instance, placing repeat orders divided by the number of clients served by the individual sales team member and reported as a percentage. Retaining clients is as important as acquiring new ones. This KPI will measure a sales team member's ability to maintain client relationships. A high percentage will suggest strong client service and understanding of client needs which is needed to long-term sales growth.

#### **Average percentage discount granted**

Total discount divided by total recommended selling price. Overuse of discounts to generate sales should be monitored. If too many discounts are given, this could eventually erode profits even though sales volumes may increase. This links with the revenue generated measure and acts as a check to see if excessive discounts are being used to generate revenue.

# CGMA OPERATIONAL CASE STUDY

## MAY & AUGUST 2025

### EXAM ANSWERS

#### Variant 5

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#### SECTION 1

##### **Production overhead variances for the Baking Department for May 2025**

###### **Variable overhead expenditure variance**

The variable production overhead expenditure variance is adverse, which means that, for the actual machine hours worked, we spent more on variable production overheads in the Baking Department than we should have based on our standard.

There are two key events in May that will have contributed to this. Firstly, unplanned overtime was worked in the month because of higher-than-planned production. The overtime premium associated with this is treated as a variable overhead and therefore will have increased the cost per machine hour. Secondly, the cost of electricity increased during the month as a result of external market forces. This was unforeseen when the budget was prepared and therefore is not included in the standard. Our ovens use a significant amount of power and this increase in the cost of electricity will also have increased variable overhead per machine hour.

###### **Fixed overhead expenditure variance**

The fixed production overhead expenditure variance has a different meaning to the variable overhead expenditure variance because it is measured against originally budgeted fixed costs rather than a flexed budget to reflect actual machine hours worked. This variance is favourable, which means that we spent less than we had budgeted to spend in the month on fixed production overheads.



Fixed production overhead includes a vast array of costs and there are potentially numerous reasons for this overall underspend. One reason will be the fact that we lost three supervisors at the start of the month but have only replaced one of them. This will have reduced salary costs in the month compared to the budget. We also delayed scheduled maintenance of the ovens until June because of the increase in production. This is simply delaying the expenditure and as such we can expect an adverse variance next month when the maintenance happens.

### **Variable and fixed overhead efficiency variances**

The variable and fixed production overhead efficiency variances have the same meaning because both are calculated as the difference between the standard machine hours needed for actual production and the actual machine hours worked, multiplied by the appropriate standard absorption rate per hour. Both variances are adverse, which means that it took more machine hours to complete actual production than standard.

This variance measures the efficiency of the absorption base which is machine hours. There are two main reasons for the adverse efficiency variances. Firstly, there was an issue with the production line feeding the ovens that resulted in machine idle time whilst the issue was fixed. The ovens were kept on and therefore machine hours were being worked, despite the fact that nothing was being baked. Secondly, the production line now operates at a slower rate than before.

### **Fixed overhead capacity variance**

The fixed overhead capacity variance reflects the difference between the budgeted machine hours and the actual machine hours worked, multiplied by the standard fixed overhead absorption rate per hour. This variance is favourable, which means that more machine hours were worked than budgeted, reflecting an increase in the capacity of our machine resource.

We are not told that we installed any new machinery, therefore it would appear that the machines simply ran for longer periods during the month. Unplanned overtime was worked in the month, indicating that shifts were either lengthened or additional shifts worked. Note that the fixed overhead production efficiency and capacity variances added together give a favourable volume variance. This is due to a higher volume of production than budgeted in May.

### **CGMA cost transformation model**

#### **Engendering a cost-conscious culture**

This part of the model suggests that to drive cost competitiveness, whilst also preserving customer value, a business needs to have cost transformation and cost management front and foremost within its culture. This applies to directors and senior managers, but also to all other employees, no matter how junior. Everybody in the business needs to be actively conscious of where costs are incurred and be encouraged to share ideas of how costs could be transformed.

Within the Baking Department, there are two examples of how being cost conscious is already happening within our business. Firstly, David Good's decision in May to keep the ovens at temperature was driven by considerations of the potential overall cost impact on the business of having to power down and then reheat the ovens. Secondly, the decision to replace three supervisors with one was taken at a team meeting. This was therefore driven by members of the team that were closest to the situation and understood that given recent working practice changes, cost savings could be made without detrimental impacts on operations.

Going forward, it will be important that this type of culture needs to be supported. It needs to be embedded into all aspects of training and employees need to be given the opportunity to have their ideas heard and see that, where appropriate, actions are taken.

### **Incorporating sustainability to optimise profits**

In the current world, investor and customer decisions are increasingly driven by considerations of sustainability in terms of products and company practices. Acting in a sustainable fashion means seeking to limit the impact of our operations and activities on the natural environment. Being seen to be acting sustainably can increase the reputation of our brand, which in turn potentially gives a boost to sales. Further, acting sustainably can lead to long-term cost reduction through lower levels of waste and more careful use of the resources that we have.

Our published mission statement already has sustainability at its core in terms of the ingredients that we use, treating suppliers fairly and an aim to be carbon neutral by 2040. There are already measures that we use in our business to support sustainability. For example, we have been replacing diesel delivery vehicles with electric vehicles and source flour from suppliers located within 50km of the Production Facility to reduce food miles.

However, there is much more that could be done where being sustainable could actually lead to cost reduction. For example, the significant expenditure variances in the Baking Department for May are to a large extent due to an increase in global electricity prices. Our production processes are power intensive and investing in technologies to generate our own power (for example, with solar panels or wind turbines) could ultimately lead to cost reductions over time. Not only that, using self-generated power for production would benefit our reputation and help us to achieve our mission.

### **Understanding cost drivers and cost accounting systems and processes**

The model says that in order to drive down cost, whilst protecting customer value, we need to fully understand why the costs that are incurred arise and how different variables affect those costs. We need to be aware of the drivers of cost as this will enable us to manage those drivers with the aim to reduce cost.

We currently use a standard absorption costing approach where we set the standards annually and absorb production overheads on the basis of machine hours. Whilst our production processes are machine rather than labour driven, this is a simplistic approach to costing and provides little insight into the actual drivers of cost. That said, as noted above, within the production teams, there does appear to be understanding of cost drivers, for example, with the ovens.

However, in order to achieve more understanding of what is driving cost in our Production Facility, we could implement activity-based costing. This would involve identifying individual activities within each department (for example, setting up ovens in the Baking Department) and then identifying the cost drivers associated with each activity (for example, number of set-ups). By understanding the cost drivers in detail, we are better placed to control and therefore reduce the cost.

## **SECTION 2**

### **Wind turbine**

#### **Recognition**

In accordance with IAS 16: Property, Plant and Equipment, property, plant and equipment are tangible items that are held for production, supply or administrative purposes and are expected to be used for more than 12 months. The wind turbine is to be used to generate power for use in the Production Facility and we will expect to use it for more than 12 months and hence these criteria are being met.

Also in accordance with the standard, the cost of an item of property, plant and equipment can be recognised as an asset if it is probable that future economic benefits associated with that item will flow to the company and the cost can be measured reliably. Given that we will use the wind turbine to generate power, we will be gaining economic benefit from the asset. In addition, presumably the cost estimates in Table 1 are reliable and so the cost can be reliably measured. We can therefore recognise an asset as part of non-current assets in our statement of financial position.

#### **Initially measured**

IAS 16: Property, Plant and Equipment states that an asset should be initially measured at cost. The cost of an asset is its purchase price (which includes non-refundable purchase taxes) and costs which are directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating as management intends.

The amount that the wind turbine is initially measured at will be its purchase price of K\$1,850,000 plus K\$123,500 of installation and connection costs plus the K\$12,000 cost of the safety inspection. These last two costs are included because they are necessary or legally required for getting the asset to a location and condition where it can be used to generate power.

#### **Impact on reported profit**

The wind turbine asset will need to be depreciated over its useful life from the date that it is available for use. This will be after the completion of the safety inspection and so with effect from 1 December 2025. Therefore, for the year ending 31 December 2025, 1 month of depreciation will be recorded in the statement of profit or loss. This will reduce reported profit for the year.

Where an asset has elements that have different useful lives, IAS 16 states that the initial cost of the asset should be split into its elements and depreciated separately. The main part of our wind turbine has a useful life of 15 years; however, the blades need to be replaced every 5 years and therefore have a useful life of 5 years. Using the straight-line method, depreciation for the blades will therefore be calculated as K\$600,000 (cost) less any residual value divided by 5, then pro-rated for 1 month. The depreciation charge for the rest of the asset will be calculated in the same way, based on the remaining initial cost and a 15-year useful life.

## **Old ovens**

### **Classified**

We are planning to sell our old ovens and therefore we need to consider at what point the ovens become assets held for sale in accordance with IFRS5: Non-current Assets Held for Sale and Discontinued Operations. An asset is reclassified as an asset held for sale from the date that it is available for immediate sale in its present condition and its sale is highly probable.

A sale is highly probable when: management are committed to sell the asset; there is an active program to find a buyer; the asset is marketed at a reasonable price; the sale is expected to take place within 12 months; and it is unlikely that the plan to sell the asset will change.

In this case, the old ovens appear to meet the above criteria on 1 October, as on that date:

- Safety testing will be complete and so the ovens are available for sale in their present condition.
- The ovens will be marketed and presumably there will be an active program to find a buyer, management are committed to the sale and the plan is unlikely to change.
- The sale is expected to take 7 months and the ovens will be marketed at K\$50,000, the specialist valuers estimate, which is likely to be a reasonable price.

Therefore, the old ovens will be reclassified as assets held for sale and included within current assets in the statement of financial position from 1 October.

### **Measurement**

The old ovens will continue to be depreciated until 1 October, the date that they become held for sale. The carrying amount on that date will be K\$62,000 less 9 months worth of depreciation at K\$1,000 a month, and therefore K\$53,000 (K\$62,000 – K\$9,000).

When the ovens are reclassified, we need to compare this carrying amount of K\$53,000 with their fair value less costs to sell and measure the asset at the lower of these. For the ovens, fair value less costs to sell will be K\$50,000 (selling price) less K\$1,500 (safety testing costs) less K\$3,400 (selling costs), and so K\$45,100.

Given that fair value less costs to sell will be lower than the carrying amount, we will write down the ovens to fair value less costs to sell, with the difference from the carrying amount charged to profit or loss. There will be no further depreciation of the old ovens after reclassification as an asset held for sale.

## **KPIs for sustainability of the production process**

### **% of self-generated power consumption**

This would be measured as the amount of self-generated power used in production in a period (measured in kilowatt hours (kWh)) divided by total amount of power (kWh) used in production in the same period, expressed as a percentage. This could be captured on a daily basis, with a rolling total for the month also included in the dashboard.

Generating and using renewable power from our own wind turbine is better for the environment than using power sourced from the national grid from non-sustainable sources such as coal. The greater the proportion of self-generated power we use, the more sustainable our production processes and the closer we are to achieving our goal of being carbon neutral by 2040.

### **Power consumption per production batch**

This would be measured as the number of kWh used in a period divided by total number of production batches of loaves or rolls in the same period. This could be calculated on a daily basis and the results tracked on a rolling graph in the dashboard.

Using power (especially from non-sustainable sources) creates emissions that are harmful to the environment. Therefore, to improve the sustainability of our production processes, we need to be as efficient as possible with our power usage. Measuring and monitoring overall consumption of the energy used in the process, and aiming to reduce this, will focus workers, supervisors and managers to continuously improve.

### **% of raw material waste**

This would be measured as weight (kg) of raw material wasted in a period divided by total weight (kg) of raw materials used in that same period, expressed as a percentage. This again could be measured on a daily basis and a rolling measure for the month shown on the dashboard. We could supplement this measure by splitting out what happens to the waste (for example, sent to landfill, sent for animal feed and so on).

Limiting the amount of waste is an important aspect of sustainability and we should be aiming for 0%. However, given that we make bread and our raw materials are by nature perishable and have a short shelf-life, some waste is almost inevitable. Regardless, we should seek to limit this as far as possible through careful ordering and production scheduling, as this limits our impact on the environment as well as saving cost.



## SECTION 3

### **Zero based budgeting (ZBB) approach for employee training costs**

ZBB is an approach where, as the name suggests, the budget starts from a zero base but is then built up based on appropriate justification of each element of the budget. This is unlike our usual approach to budgeting, which is to use last year's budget as a base and make adjustments for known changes and inflation.

Using ZBB, managers will first determine the activities that will generate cost for each support activity and these become the decision units. For production employee training, the activities will be the different types of training that have to happen, for example, induction and Health & Safety training. Each activity will have an objective associated with it. For example, the objective of Health & Safety training will be for all relevant employees to achieve certification every 2 years.

For each decision unit, there will be different ways in which its objective can be achieved or different levels of expenditure that could be incurred. These choices are reflected in decision packages which should be drawn up by those people involved in training (rather than the finance team). Decision packages can be mutually exclusive (different ways of achieving the same objective) or incremental (different levels of service to achieve the objective but with slightly different outcomes).

Health & Safety training is currently outsourced and therefore mutually exclusive decision packages for this type of training could be to continue with this or to bring it in-house. Each of these possibilities would be fully costed and the potential benefits determined. In this case, a key benefit of outsourcing is that the external training company is most likely an expert in Health & Safety training, which means that our employees are more likely to pass the test and receive certification.

For induction training, we can develop incremental decision packages, starting with the base package. This is the minimum that would need to happen to ensure that employees had a sufficient level of knowledge about the company from the induction training. Our current induction course is 8 years old and is the same for all employees, regardless of role. Using ZBB, we can develop a base package based on the minimum that we would require them to know (which may only require an hour of training time) and then develop incremental packages that could be added to this (possibly based on roles).

Once all of the decision packages are properly costed and the benefits of each identified, this will give management a lot of information about how each type of training could be performed and the wider benefits to the business. The decision packages will be ranked on a cost-benefit basis and the budget allocated.

## **Benefits and challenges of using a zero based budgeting approach**

### **Benefits**

A key benefit of using a ZBB approach is that past inefficiencies included in the budget are removed. We currently use incremental budgeting, which means that the budget is set each year based on what has happened before. For the training budget, this means that we will budget for the same induction course as last year. With ZBB, the past is ignored and the budget is built from scratch based on an assessment of the best balance of the costs of training against the benefits of training. For induction training, for example, we might find that a whole day is not required when role-based decision packages are considered as an individual will only need the role-based package relevant to them.

Another benefit of using a ZBB approach is that it will force management to focus on both the costs and benefits of different training activities through the development of decision packages. This would help management to focus on the effectiveness of these different options and to ensure that resources are allocated to the most effective option. For example, it might be decided to continue to outsource Health & Safety training to experts, even though this might cost more than doing it in-house, because of the greater benefits.

This approach will also help to ensure that training is viewed as an important function by all managers, rather than just a drain on resources. Quantifying and then discussing the benefits of spending money on training will help managers to appreciate the need for the activity.

### **Challenges**

In terms of challenges, it can be difficult to establish and quantify the benefits of a decision package. For example, whilst we know that a benefit of Health & Safety training is awareness of issues, ultimately leading to a reduction in (or hopefully zero) work placed accidents, it will be difficult to quantify the effect of this in terms of future cost savings and benefits to employee morale. The intangible nature of many of the benefits (such as employee morale) also leads to issues when ranking decision packages because quantitative information is much easier to compare than qualitative information.

Another challenge is that using ZBB, especially for the first time, is time consuming. The managers closest to the support activity need to be closely involved with determining and then fully costing and justifying decision packages. These managers will need training (which has a cost attached) and the necessary time to complete the task properly. Some managers may resent the time involved and see it as a waste of time, especially if they do not foresee any personal benefit.

Finally, using a ZBB approach can sometimes lead to managers focusing on the short term rather than the longer term, given that it is used to create an annual budget. There is a risk that management undervalue some of the longer-term benefits from, for

example, creating a training hub to bring expertise in areas such as Health & Safety training in-house.

### **Perfect information**

If we had taken a risk neutral approach to the decision, we would have selected Campaign 1 because it has the highest expected value of K\$1,195,000.

This campaign gives us the best outcome when market reaction is good. If this were to happen, it would not have been worthwhile buying the perfect information because we would have paid K\$60,000 but achieved the best outcome anyway. There is a 50% chance of this happening.

However, there is a 50% chance of either a very good or a poor market reaction. If market reaction was very good, Campaign 1 would result in K\$100,000 less profit than would be achieved for the best outcome here (which would have been to select Campaign 2). If market reaction was poor, this difference would be K\$270,000 (compared to Campaign 3). Having the perfect information would protect us from this and, in both cases, the cost of the information is lower than the differential in profit and so is worthwhile.

## SECTION 4

### Linear programming graph

#### **Graph 1 and optimal production plan**

Line A on Graph 1 represents the constraint for seeds and shows the different combinations of Rustic-1 and Rustic-2 production that will use up all of the available seeds. Line B represents the same for baking hours. Line A indicates that Rustic-1 requires less seeds per batch than Rustic-2 because we can produce more of Rustic-1 in isolation than Rustic-2. The opposite is the case for baking hours.

Lines C and D on the graph are the demand constraints and represent the total number of batches of loaves required to satisfy the special orders. The lines indicate that we have special orders for 350 batches of both Rustic-1 and Rustic-2.

The iso-contribution line shown on the graph represents the relative contributions of each type of loaf. This is just one example of an iso-contribution line. There are actually multiple lines possible, starting at low levels of contribution near the origin and higher levels of contribution the further away from the origin the line is.

The feasible area of production can be identified on the graph as to the left of line C, and underneath lines A, B and D. Production has to be somewhere in this region given the constraints in place and is the area of the graph which starts at the origin and is contained by lines D, A, B and C.

The optimal production plan can be found by placing a ruler on the iso-contribution line and moving the ruler away from the origin to find the point at which the line is just about to leave the feasible region. In Graph 1, this is where lines A and B intersect and represents the point where contribution is maximised given the constraints. Therefore, the optimal production plan is to produce around 220 batches of Rustic-1 and 280 batches of Rustic-2.

#### **Factors to consider**

At the optimal production plan, we will utilise all of the available seeds and baking hours and these are both therefore binding constraints. One factor we need to consider is whether we can obtain any more of each resource and relax the constraints. For example, is it possible to source the same seeds from a different supplier at short notice? Even if this costs more than usual, as long as the additional amount spent is less than the additional contribution from having the extra seeds, it would be worthwhile. Similarly, is it possible to delay the correction of the faults with the ovens. Clearly, this may not be possible and could have implications for later weeks if delayed.

The optimal solution is found by maximising contribution based on the constraints and takes a short-term view of the decision. It is not clear which customers have made these special orders, whether they are existing customers or new customers. Another factor we need to consider therefore is who these customers are. If there is potential for significant future sales from new customers or a risk that not fulfilling the special

orders will jeopardise relationships with existing customers, this needs to be factored into the analysis.

We also need to consider whether the information used to draw up Graph 1 is accurate. For example, are the number of baking hours known with accuracy? If fault fixing takes longer than expected, this will reduce the number of baking hours available. For seeds, are we confident about the inventory levels that we hold and therefore have available?

### **The EOQ model and the information required to calculate EOQ**

The EOQ model is used to calculate, for a single type of raw material inventory, the optimal order size that will minimise the total of inventory holding costs and inventory ordering costs. The higher the order size, the higher the level of inventory and therefore holding costs, but the lower the ordering costs (because higher order size means fewer orders). The lower the order size, the lower the inventory level and therefore the lower the holding costs, but the higher the ordering costs (because of more frequent orders). The EOQ model seeks to find the optimal point that balances these two costs.

For each type of grain and seed that we purchase, we will need to establish:

- Annual demand. This will depend on the level of anticipated production for all of our products that use that grain or seed.
- The cost of placing an individual order. This will include the cost of the time taken by the Purchasing Department, internal administrative costs and any goods in delivery costs.
- The cost of holding one unit of inventory for one year. Holding costs will include insurance, storage costs (such as energy used in the warehouse, employee training costs for safe handling, handling employee time) and the finance cost associated with the investment in working capital.

### **Problems in using the model and how to overcome**

The problems associated with the assumptions underpinning the model and how these can be overcome are summarised in the table below.

<b>Problem</b>	<b>How to overcome</b>
The model assumes that annual demand can be determined with a reasonable level of certainty and that this demand is constant throughout the year. This is unrealistic because demand for our Multi-seed and Rustic loaves fluctuates, especially given the special orders that we have recently started to produce and sell.	Both uncertainty in demand and variable lead times can be adjusted for in the EOQ model by setting a safety or buffer level of inventory. This increases overall holding costs but allows flexibility to schedule production where demand is higher than expected or where lead times are longer than expected. A downside though of holding buffer inventory is that gains and seeds have a relatively short shelf-life and so we would need to ensure very careful rotation of inventory.
The model also assumes that lead time is constant or zero. However, over the last few months, we have experienced variability with some of our suppliers' lead times and therefore this isn't realistic.	
The model also assumes that there are no bulk discounts and that, as a result, purchase cost is the same regardless of the amount ordered. However, we do have bulk discounts, although recently we have not been claiming these, as we have been ordering lower quantities.	We can expand the EOQ model to incorporate bulk discounts. This is done by calculating the total of purchase, ordering and holding costs at the EOQ and the total of purchase (net of discount), ordering and holding costs at the minimum order quantity to claim the bulk discount. The optimal order quantity is the one which gives the smallest total cost.



# CGMA OPERATIONAL CASE STUDY

MAY & AUGUST 2025

## EXAM ANSWERS

### Variant 6

*These answers have been provided by CIMA for information purposes only. The answers created are indicative of a response that could be given by a good candidate. They are not to be considered exhaustive, and other appropriate relevant responses would receive credit.*

*CIMA will not accept challenges to these answers on the basis of academic judgement.*

#### SECTION 1

##### **Beyond Budgeting**

Beyond budgeting challenges traditional budgeting methods by advocating for more flexibility, moving away from the idea that things won't change and last years or even last periods assumptions will continue to be valid. The use of rolling budgets, produced quarterly or monthly as opposed to annually, is fundamental to beyond budgeting, meaning that figures should represent the environment we are currently facing rather than looking backwards and using obsolete figures.

The effect of this is that it should allow us to allocate resources on a timelier basis based on current fluctuations in consumer preferences, raw material costs (for example, flour and sugar) and external factors like supply chain disruptions. All of which we are increasingly facing. By being able to respond more quickly to such changes in our production and performance, Halfpenny will be more agile and in turn more profitable.

Performance evaluation targets would move from historic internal variances against a fixed budget to being based on relative performance against competitors or market conditions. They would also expand to cover areas such as customer satisfaction. Therefore, beyond budgeting emphasises relative targets and continuous planning, encouraging us to improve operations and adapt our strategies against the wider market to improve competitiveness.

There is a greater focus on considering future possible scenarios, such as changes to consumer demand or flour prices and their effect on our business. In turn, this may hopefully lead to production innovations, such as to reduce flour usage for instance,

or change the types of breads offered to customers. As opposed to explaining why an historic variance has occurred, this forward focus will, in turn, improve our future performance and profits.

Whilst we have only a limited scope for a decentralised decision-making process in our bakery as we are all on one site and driven by customer contracts, beyond budgeting can still make us a more responsive and engaged team. This is because targets will become more challenging and market focused, to anticipate changes in demand. Also, there will be a focus on rewarding innovation.

Beyond budgeting promotes faster and more open information systems, allowing managers to take decisions more quickly, fostering a culture of trust, with greater autonomy, within limits. Currently, the production managers have little involvement in budget setting. Beyond budgeting encourages them to be accountable for achieving Halfpenny's strategic objectives and not just adhering to a predetermined budget, which is an empowering cultural change. Overall, beyond budgeting moves the focus past merely meeting a budget and towards achieving strategic objectives such as market share growth, customer satisfaction and cost leadership.

### **Types of costs seen when developing the bread ordering app**

Developing a custom bread ordering app for our convenience store customers will require us to recruit additional developers or outsource the development to a software company. There will be different phases in development including the design phase, coding, testing and launch. Costs for this stage may be fixed or based on an hourly rate. Including more complex features such as real-time updates to track bread deliveries will add to development costs. The app will need to integrate with our existing inventory, production and distribution systems. To ensure the compatibility of the new app and seamless data flow, we will need customisation and specialised software which will increase costs.

Convenience store owners and managers are likely to use multiple platforms when placing an order such as iOS, Android and the web, which will also increase both the initial development cost and future maintenance costs. Whilst the Fresh Picks contract will be paid centrally if we intend to use this app for all our convenience store customers, then it may require integration with third-party services, such as payment gateways for instance. Other third-party services which will be required by all potential users may include delivery tracking and communication tools for notifications. Such services often come with usage based recurring costs.

### **Future issues and ongoing costs we should consider**

#### **Maintenance and customer support costs**

After the app's initial launch, there will be ongoing maintenance costs to ensure it remains compatible with updates to mobile operating systems, to fix bugs, and to improve security. Regular updates will be necessary to address customer feedback, add new features and fix any technical issues. This requires ongoing development work, which adds to long-term costs. As we move from our paper-based system to the

digital system, there will likely be an increased need for customer support to assist convenience store customers in using the app. This could involve hiring additional support staff or outsourcing to a customer service provider.

### **Data security and compliance**

Handling customer data digitally introduces the risk of data breaches, so investing in robust data security measures is essential. This includes encryption, secure servers and compliance with data protection regulations. Implementing these measures will incur both upfront and ongoing costs. We will also have to consider whether the app may need to comply with Keeland's data privacy regulations. Ensuring compliance will involve legal consultations, system audits and possibly certification, all of which can be costly.

### **Training and change management**

Transitioning from a paper-based system to a digital app will require training for our customer services and production staff. This will need to include initial training for when customers first transition from the paper-based system and ongoing support as the system evolves. We will also need to consider running an information campaign, which may be done by our internal team, to make existing convenience stores customers aware of the upcoming change. Training sessions and online resources will also be required to support convenience store managers in the initial change and in the short term to assist in adopting the new system. This could mean we incur costs, either internally or through a third party, to develop user guides and training sessions. Such costs may even extend to incentives to encourage early adoption of the app such as discounts or promotions.

### **Opportunity costs**

It is likely that implementing the app may temporarily disrupt daily bread orders and deliveries as our customer service teams and production staff adapt to the new system. This could result in reduced production of bread and potentially lost sales during the transition period which would be a cost to the business. To be successful, development of the new app will require management attention and resources which may distract focus from other critical business activities, such as maintaining the quality of the loaves and rolls produced or pursuing new contracts in the organic bread market.

### **Scalability and future-proofing**

Building the app so that it can handle rapid advancements in technology as well as future growth, including increased bread order volumes and potential expansion may involve higher upfront costs; however, this may save cost in the future by preventing more expensive upgrades or redesigns.

## SECTION 2

### **Purchase of oven**

In accordance with IAS 16: Property, plant and equipment, the new oven should only be recognised as an item of property, plant, and equipment when it is probable that the economic benefits of the machine will flow to us and its cost can be reliably measured. This will be the case for the oven as we will use it in our new organic facility to make organic bread. In addition, the oven is a tangible asset and will be used for more than 12 months.

When recognised, it will initially be measured at its cost. IAS 16 allows for initial recognition costs to include any directly attributable costs to bring the oven to our facility and to make it operational. Therefore, this cost will include not only the K\$267,800 purchase price but also the K\$15,670 for delivery and installation and the K\$9,300 cost of upgrading the electricity supply as this is specifically required to allow the oven to be used.

There is the potential for additional subsequent expenditure to be capitalised under IAS16 if it is a cost of a major inspection looking for faults. The annual K\$2,312 safety certificate would not fall under this category as this is an annual service. This cost should therefore be recognised in the statement of profit or loss as incurred.

The K\$2,500 training cost which will allow the existing maintenance team to install the oven will be recognised in the statement of profit or loss rather than being capitalised, as it does not meet the definition of an asset. Whilst such training may lead to future economic benefit for our business, we cannot capitalise the cost as it is not specific to this oven. Also, we cannot control the staff, as they are free to leave the business at any point and take their acquired skills with them.

### **Initial measurement of lease liability and right-of-use asset**

The lease contract gives the right-of-use of the conveyor belt system for 5 years in exchange for the lease payments. So, at the commencement of the lease, we, as the lessee, should recognise the lease liability and a right-of-use asset.

### **Lease Liability**

The initial measurement of the lease liability is the present value of lease payments which have not yet been paid. This is calculated by multiplying the annual lease payments of K\$67,923 a year (excluding the initial payment made in advance) with the relevant discount factors at the interest rate implicit in the lease (14.6%) to obtain the present value. The present value should not include the cost of K\$56,112, which is the cost of the option for us to buy the conveyor belt system at the end of the lease period as this is unlikely to be taken up.

## **The right-of-use asset**

The right-of-use asset is initially recognised at cost in the statement of financial position. Cost will include the amount of the initial lease liability. It will also include any payments made before the commencement date such as the K\$1,500 paid to the agent arranging the lease as it is a direct cost of obtaining the lease. Any estimated costs of removing the asset at the end of the lease period, in this case the fee of K\$10,663 due to remove the conveyor belt system, should also be included. As should the initial payment in advance of K\$67,923.

## **Differences between invoice discounting, factoring and an overdraft**

Whilst an overdraft has a pre-agreed limit for a set period with a bank, the amount of available funds raised using invoice discounting or factoring can increase as the level of sales rises. This can be useful as sales rise.

The annual overdraft fee (K\$15,000) is lower than the fee for either invoice discounting (K\$40,000) or factoring (K\$210,000). Invoice discounting fees are usually lower than factoring fees as with invoice discounting most sales administration will be done in-house but with factoring it will be done by KSF. There will be a cost saving from using factoring as we won't need sales processing or credit control functions. This may mean that, unless staff can be redeployed, there may have to be redundancies.

The interest cost for the overdraft (7%) is higher than both the invoice discounting and factoring cost at 5.5%. As such, the value and duration of borrowing will determine which is the most cost effective.

The cost of irrecoverable debts will be removed with the invoice discounting option as KSF are offering a without recourse facility. This will not be the case for the factoring facility (which is with recourse) or the overdraft (where we will continue to collect our own debt).

There is also the fact that using factoring or invoice discounting would result in a one-off cash boost compared to using an overdraft, as money would be released on raising sales invoices.

## SECTION 3

### KPIs

#### **Waste to production ratio (WPR)**

Here, waste is defined as the total quantity of waste generated during production and can include leftover dough, burnt or defective products and packaging waste. Total output is the value of finished bread produced. The calculation is total waste value produced divided by total production value as a percentage. This ratio indicates how efficiently we are converting raw materials into finished products and can be used to drive innovation which in turn would lower the WPR ratio. A low WPR indicates low waste and better utilisation of raw material and production resources.

#### **Percentage of defective products**

Here, the total number of defective loaves is divided by the total number of loaves produced and reported as a percentage. This measures the effectiveness of the quality control processes with a high level of defective products suggesting inconsistent baking times or ingredient quality which needs to be rectified. An increasing level of poor-quality products can lead to reputational damage and increased returns if they are not identified before our bread is delivered to our customers.

#### **App conversion rate**

This KPI measures the percentage of convenience stores that download the app successfully and place an order. This is calculated by dividing the number of orders placed via the app by the number of app downloads and reporting this as a percentage. The number of orders placed via the app refers to the total number of orders placed through the app in each period. Whilst the total number of downloads is the total number of unique downloads or installations of the app during the same period. This assesses how effectively app downloads are turned into orders. A low conversion rate may indicate issues with convenience store managers' experience, such as difficulties in navigating the app or unappealing product displays. This KPI will be useful to assess how quickly and how well convenience stores adopt the new app but may not be required in the long term if the app deployment is successful.

#### **Order fulfillment accuracy rate**

This KPI measures the percentage of orders placed through the app that are recorded accurately by the app and communicated to the facility accurately, so, the customer received the correct number of loaves on the specified day. The calculation is the number of accurate orders divided by the total number of orders placed via the app. Where the total number of accurate orders is those that were fulfilled without any errors, whilst the total number orders placed is the total number during a given period irrespective of whether there were errors or not. A higher number of successful orders will increase customer satisfaction as the bread will be fresh and delivered in time for sales to be made. Errors in orders may lead customers to abandon the app or switch to competitors. This will also help us to identify how well our production systems are integrated with the app and help us build a positive reputation in the market.



## **Big data and big data analytics to support planning and control in sales budgets**

The sales budget relies on us understanding the number of loaves and rolls we will sell and the price we will sell them at. The move from long-term contracts with stable prices to the Fresh Picks contract with volatile demand and low profit margins introduces significant uncertainty, which traditional methods of gathering data may struggle to respond to. Using big data, with information from the web and databases for instance as well as big data analytics, can help us manage this uncertainty and support more accurate and dynamic sales budgeting.

### **Forecasting sales revenue**

Historically, we could have relied on predictable, long-term contracts to estimate future sales with budgets based on these stable, known revenues. With contracts such as Fresh Picks having fluctuating customer orders, historic sales data may no longer provide reliable forecasts. We have been trading for many years, so even though our internal historic data may not be as reliable as it once was, big data analytics can still use it to help identify trends in these data points.

Even in volatile markets, by analysing large volumes of our historic data, it can look for recurring patterns that may indicate future demand. It can also incorporate external data in its analysis, such as weather patterns (which can influence bread consumption), economic indicators such as inflation, and social media trends, that can provide additional insights into demand fluctuations.

As well as this, machine learning models can analyse complex datasets to generate more accurate forecasts, using algorithms that adjust predictions dynamically as new data becomes available. Predictive analytics can also anticipate demand spikes or declines, helping us to prepare more accurate sales revenue budgets and plan more accurately.

### **Pricing strategy and profitability analysis**

Previously our long-term contracts set prices with infrequent adjustments, with price strategies based on covering costs plus achieving a target margin. With low profit margins, volatile demand and short-term contracts we will require a more dynamic pricing strategy which can respond quickly to market conditions whilst still achieving profit.

Big data can analyse customer purchasing behaviour along with competitor pricing and market trends. We can then use this analysis to develop dynamic pricing models that adjust prices in real time based on demand fluctuations and cost changes. For example, during periods of high demand, prices can be increased slightly to boost margins, while discounts can be offered during slow periods to attract customers to utilise spare capacity for instance. We can also look to gain a competitive edge from analysing profitability on a product-by-product basis, as well as by customer segment, or sales channel. By allowing us to make informed decisions around which loaves or rolls or customers are the most profitable, we can then adjust our product mix and marketing focus in real time to maximise our overall profitability.

## **Scenario planning and risk management**

In a stable market, it is possible to set a budget with minimal scenario planning as revenues and costs are predictable. However, increased demand volatility and low profit margins require significantly improved budgetary planning and control to ensure that risks and uncertainties are reflected in our planning figures.

Big data analytics can simulate different market scenarios we might face such as demand surges or supply chain disruptions and evaluate their potential impact on our revenue, costs and profitability. Such stress testing or sensitivity analysis will allow us to prepare for different contingencies and incorporate their effects into the budgeting process. We can also use predictive analytics to help identify potential risks such as changes in customer preferences or customer insolvency before they occur. Thereby allowing us to budget for potential risks more accurately and set aside contingency funds.

## **Monitoring and budget variance analysis**

With increased market volatility, traditional budget variance analysis, where actual performance is compared against budget, may not be sufficient to ensure performance is controlled. Rather we will need to monitor our performance more frequently and adjust the budget on an ongoing basis as conditions change. Such mid-term changes to budgets would traditionally have taken time and resources to achieve, as well as distracting managers and staff from day-to-day operations.

Big data analytics will enable us to achieve real-time monitoring of key performance indicators (KPIs), such as sales volumes, production efficiency and ingredient costs. By having this up-to-date information, we can quickly identify when performance deviates from the budget and take corrective action. Using advanced analytics, we can easily create rolling sales forecasts and flexible budgets that adjust as new data comes in. This information will also support and strengthen a move to beyond budgeting. Together, beyond budgeting and data analytics will help us to ensure a more effective production response to changes in sales ensuring that the budget remains relevant throughout the financial period, waste is minimised and profit maximised.

## SECTION 4

### **Sales variances**

#### **Sales price variances**

There are adverse price variances of K\$14,000, K\$9,333 and K\$27,500 for White, Wholemeal and Multi-seed organic bread respectively, which mean that we have sold these loaves at a lower average price over the period than our standard price. It seems strange that we lowered our prices on a contract so soon after it started. Perhaps we offered some additional discounts on orders after the traffic problems to compensate for late and/or missed deliveries to Fresh Picks. Such discounts would not have been part of the planned discounts budgeted at the beginning of the year.

The Rustic organic loaf has a favourable price variance of K\$23,085. Again, this is strange coming so soon to the start of the contract. Perhaps Fresh Picks realised that they could sell the Rustic loaves at a premium price, especially after they featured on television, and thought it fair to pass some of the premium on to us and thereby foster a good relationship. Also, it may be that contract prices have been revised and the revisions not reflected in the standard prices used for the period.

#### **Sales volume profit variances**

The total sales volume variance is a measure of the effect on profit of sales volumes differing from budgeted sales volumes. During the period, we had adverse variances for White, Wholemeal and Multi-seed loaves of K\$13,234, K\$4,584, and K\$21,033, respectively. These signify that we sold less of these loaves than budget. The adverse variances could be due to the impacts of the major road closures. It would help if we had further information. For example, was production of all types of loaves impacted to the same degree by disrupted deliveries of raw materials? Similarly for deliveries of loaves to Fresh Picks. There was a favourable variance of K\$34,183 for Rustic loaves. The increased demand could be due to the television programme and/or consumers preferring the Rustic loaves much more than Fresh Picks originally thought.

The volume variances are exposed to problems caused by the terms of the contract with Fresh Picks. To calculate variances, we need standards for price and quantities, and in the case of sales volume variances, we use the budgeted volumes for the period. Therefore, the value used as the budget for sales to Fresh Picks for the period will affect the outcome. If we used the forecast at the beginning of the period, this could soon become obsolete as the terms of Fresh Picks contract allow them to revise their demand volumes on an ongoing basis. Due to this, it may be useful to reconsider how we review sales performance. A reporting system based on historic and obsolete forecasts will be of limited use in the dynamic context imposed by the Fresh Picks contract.

## **Sales mix profit variances**

The comparatively large favourable sales mix profit variance for Rustic loaves could be because of the television programme and/or consumers preferring Rustic loaves much more than Fresh Picks originally thought. The mix variance shows the possible substitution of one type of loaf for another. Here, it is clear that Rustic loaves made up a bigger proportion of the actual sales than was originally thought and sales of other loaves suffered consequently.

As with the volume variance, the mix variance will be impacted by changes made to orders placed by Fresh Picks. A change in customer preference will cause Fresh Picks to change their orders. This in turn will impact on the proportions of the total volumes ordered of each of the differing types of loaves. Because of this, a forecasted standard mix could soon become obsolete and thereby make the mix variances of little use.

Additionally, our variance analysis is presented in monetary terms. Each type of loaf has differing selling prices and profits. This makes a rapid consideration of production volume changes difficult to gauge. It may be useful to consider also including an analysis of volumes (rather than values) as well going forward.

## **Regret table**

The Production Director was faced with uncertainty around the level of production for organic Rustic rolls due to the loss of the order data from the convenience stores.

## **Minimax regret criterion**

A regret matrix such as that shown in Table 2 is used to make decisions under minimax regret criterion when faced with uncertainty. The values in the table are calculated by considering the contribution (in K\$) generated under each combination of the level of estimated demand for Rustic rolls and possible output volumes. For low demand, the zero in the low column signifies that the optimal output for low demand would be to produce at a low level. Higher levels of output would result in waste and thereby incur additional costs and possible penalties. These would lower the contribution from what we would earn at the optimum by K\$5,229 and K\$13,361 for medium and high outputs, respectively.

Similarly, if we knew that demand would be normal, we would choose to produce at the medium level of output. Producing at a low level would result in lost sales. Producing at a high output level would incur unnecessary costs and penalties. Both of those levels would be financially worse for us than producing at the medium level as signified by their respective regrets of K\$2,510 and K\$9,449.

If we knew that demand would be elevated, then we would choose to produce at a high output level. Producing lower amounts would mean we would not be able to meet demand and hence the regret values shown are the contributions we would lose.

### **Why the director chose the medium output level**

Using this criterion, decision makers take a pessimistic approach to the decision being made. Here, the Production Director was looking to minimise the maximum regret for the level of production they selected based on the limited information available. The Production Director was looking to minimise the impact of making a bad decision and choosing the wrong output level.

Table 2 shows the regret in terms of contribution for each level of production. Looking at the columns in the table, which show the choices available, the Production Director would have compared the highest value in each. So, for low production, it would be K\$13,254; for medium output levels K\$6,807 and for high output levels K\$13,361. He would then choose the lowest of the three, which would be medium production, and thereby minimise the maximum impact (in terms of lost contribution) of making a wrong decision.

### **Impact of decision**

By only producing a medium level of Rustic rolls, we were unable to fulfill all orders requested by the Fresh Pick Store (although the production team was not aware of that at the time as no data was available). The only way the elevated level of demand could have been fulfilled was if production had been at high levels. This is shown by the 0 in the regret table for the elevated demand row and shows there was no regret.

The effect of this on profit was that we earned K\$6,807 less than the maximum possible. However, it should be noted that this loss was not as large as it could have been had the production team chosen to produce at a low level, as this would have cost us K\$13,254 compared to the highest level of output. This loss of K\$6,807 only considers the immediate impact of that decision and it is purely from the perspective of Halfpenny. We will not have met the requirements of Organica, and this may damage our longer-term relationship.

### **Organic Food Festival contract and relevant costs**

Relevant costs are those which will differ depending on the decision taken. To be relevant, costs must be in the future, affect cashflow rather than just be accounting entries and be incremental or different depending on whether the contract offered by the food festival is accepted or normal production completed.

### **Relevant costs**

The K\$5,000 bonus for Pia will be relevant as it is totally dependent on the contract going ahead, therefore it is relevant as it is a future cost and represents an actual cash flow.

The K\$6,500 cost of the natural food colouring is relevant for the contract and should be included in the costing it has not yet been incurred, so is a future cashflow. The food colouring is specific to the contract as it cannot be used in other products and hence has no other use.

The K\$15,500 contribution from displaced production is also a relevant cost because there is no spare capacity in the department, therefore other work will not be completed and the contribution lost.

### **Non relevant costs**

Non relevant costs are costs which do not meet the relevance criteria and therefore should not form part of the costing for the project. This will include the K\$5,750 cost of the bread samples, and the accommodation used by sales staff during negotiations with the food festival. This is because they have already been paid for and therefore have been irrevocably incurred so will not vary according irrespective of whether Halfpenny agrees to the Food Festivals offer or not.

### **Production overheads**

As the production overheads include both variable and fixed overhead absorption rates, then the variable element of K\$4,800 would be relevant as it is taken to be representative of cash flow. However, the fixed element of K\$11,200 is irrelevant as it is based on our fixed production overhead absorption rate. Any amount for fixed overheads considered as relevant for the contract must be incurred in the future, specifically for the festival.

### **More information required**

To decide if the K\$9,000 for the time of the administration team and delivery drivers should be included as a relevant cost, we need additional information.

If existing administration and delivery team members complete the administration and delivery of the rolls to the festival as part of their normal duties, then this cost will not be relevant. However, if we must specifically recruit staff or a delivery company on a temporary basis for this project, then they will be relevant.



## Operational Level Case Study May & August 2025

### Marking Guidance

#### Variant 1

#### About this marking scheme

This marking scheme has been prepared for the CGMA Professional Qualification Operational Case Study [May & August 2025].

The indicative answers will show the expected or most orthodox approach; however, the nature of the case study examination tasks means that a range of responses will be valid. The descriptors within this level-based marking scheme are holistic and can accommodate a range of acceptable responses.

General marking guidance is given below, and markers are subject to extensive training, standardisation activities and ongoing monitoring to ensure that judgements are made correctly and consistently.

Care must be taken not to make too many assumptions about future marking schemes on the basis of this document. While the guiding principles remain constant, details may change depending on the content of a particular case study examination form.

#### General marking guidance

- Marking schemes should be applied positively, with candidates rewarded for what they have demonstrated and not penalised for omissions.
- All marks on the scheme are designed to be awarded and full marks should be awarded when all level descriptor criteria are met.
- The marking scheme and indicative answers are provided as a guide to markers. They are not intended to be exhaustive and other valid approaches must be rewarded. Equally, students do not have to make all of the points mentioned in the indicative answers to receive the highest level of the marking scheme.
- An answer which does not address the requirements of the task must be awarded no marks. Markers should mark according to the marking scheme and not their perception of where the passing standard may lie.

Where markers are in doubt as to the application of the marking scheme to a particular candidate script, they must contact their lead marker.

#### How to use this levels-based marking scheme

##### 1. Read the candidate's response in full

##### 2. Select the level

- For each trait in the marking scheme, read each level descriptor and select one, using a best-fit approach.
- The response does not need to meet all of the criteria of the level descriptor – it should be placed at the level where it meets more of the criteria of this level than the criteria of the other levels.

- If the work fits more than one level, judge which one provides the best match.
- If the work is on the borderline between two levels, then it should be placed either at the top of the lower band or the bottom of the higher band, depending on where it fits best.

### 3. Select a mark within the level

- Once you have selected the level, you will need to choose the mark to apply.
- A small range of marks may be given at each level. You will need to use your professional judgement to decide which mark to allocate.
- If the answer is of high quality and convincingly meets the requirements of the level, then you should award the highest mark available. If not, then you should award a lower mark within the range available, making a judgement on the overall quality of the answer in relation to the level descriptor.

### Summary of the core activities tested within each sub-task

Sub-task	Core activity		Sub-task weighting (% section time)
Section 1			
(a)	D	Apply relevant financial reporting standards and corporate governance, ethical and tax principles.	48%
(b)	E	Prepare information to support short-term decision making.	28%
(c)	E	Prepare information to support short-term decision making.	24%
Section 2			
(a)	B	Prepare budget information and assess its use for planning and control purposes.	36%
(b)	B	Prepare budget information and assess its use for planning and control purposes.	24%
(c)	B	Prepare budget information and assess its use for planning and control purposes.	40%
Section 3			
(a)	A	Prepare costing information for different purposes to meet the needs of management.	52%
(b)	F	Prepare information to manage working capital.	48%
Section 4			
(a)	C	Analyse performance using financial and non-financial information.	24%
(b)	C	Analyse performance using financial and non-financial information.	48%
(c)	E	Prepare information to support short-term decision making.	28%

**SECTION 1**

**Task (a): Explain** how the lease liability and right-of-use asset for this lease will be initially and subsequently measured and recorded in our financial statements for the year ending 31 December 2025.

<b>Trait</b>			
Lease liability	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some technical understanding of how the lease liability will be initially and subsequently measured. The explanation lacks clarity, depth and reference to the information given.	1 – 2
	Level 2	Demonstrates a reasonable technical understanding of how the lease liability will be initially and subsequently measured. The explanation lacks some clarity, depth and/or reference to the information given.	3 – 4
	Level 3	Demonstrates a good technical understanding of how the lease liability will be initially and subsequently measured. The explanation is mostly clear, comprehensive and referenced to the information given.	5 – 6
Right-of-use asset	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some technical understanding of how the right-of-use asset will be initially and subsequently measured. The explanation lacks clarity, depth and reference to the information given.	1 – 2
	Level 2	Demonstrates a reasonable technical understanding of how the right-of-use asset will be initially and subsequently measured. The explanation lacks some clarity, depth and/or reference to the information given.	3 – 4
	Level 3	Demonstrates a good technical understanding of how the right-of-use asset will be initially and subsequently measured. The explanation is mostly clear, comprehensive and referenced to the information given.	5 – 6

**SECTION 1 (continued)**

**Task (b): Explain** the information shown in Table 1 and which option should be chosen using a risk neutral approach to decision making.

<b>Trait</b>			
Table 1	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Provides an explanation of some of the information in Table 1 and/or the decision using a risk neutral approach. The explanation lacks clarity, depth, technical accuracy and reference to the information given.	1 – 2
	Level 2	Provides an explanation of some of the information in Table 1 and the decision using a risk neutral approach. The explanation lacks some clarity, depth, technical accuracy and/or reference to the information given.	3 – 5
	Level 3	Provides an explanation of the information in Table 1 and the decision using a risk neutral approach. The explanation is mostly clear, comprehensive, technically accurate and referenced to the information given.	6 – 7

**Task (c): Explain** any limitations of using the information in Table 1 or a risk neutral approach to make this decision.

<b>Trait</b>			
Limitations	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Provides at least one limitation. The explanation lacks clarity and reference to the information given.	1 – 2
	Level 2	Provides at least two limitations. The explanation lacks some clarity, and/or reference to the information given.	3 – 4
	Level 3	Provides at least three limitations. The explanation is mostly clear and referenced to the information given.	5 – 6

**SECTION 2**

**Task (a): Explain** the figures in the what-if analysis in Table 1 and what they indicate about the impact on the current draft budgeted profit of changes in sales volume, average selling price and fixed costs.

<b>Trait</b>			
What-if analysis	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of what the figures indicate about the impacts of changes in sales volume, average selling price and fixed costs on budgeted profit. The explanation lacks clarity, depth and reference to the information given.	1 – 3
	Level 2	Demonstrates a reasonable understanding of what the figures indicate about the impacts of changes in sales volume, average selling price and fixed costs on budgeted profit. The explanation lacks some clarity, depth and/or reference to the information given.	4 – 6
	Level 3	Demonstrates a good understanding of what the figures indicate about the impacts of changes in sales volume, average selling price and fixed costs on budgeted profit. The explanation is mostly clear, comprehensive and referenced to the information given.	7 – 9

**Task (b): Explain** any limitations of the what-if analysis in Table 1.

<b>Trait</b>			
Limitations	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Provides at least one limitation. The explanation lacks clarity and reference to the information given.	1 – 2
	Level 2	Provides at least two limitations. The explanation lacks some clarity and/or reference to the information given.	3 – 4
	Level 3	Provides at least three limitations. The explanation is mostly clear and referenced to the information given.	5 – 6

**SECTION 2 (continued)**

**Task (c): Explain** how a rolling budgets approach would work and the potential benefits and drawbacks of adopting a rolling budgets approach for our production budgets.

<b>Trait</b>			
Rolling budgets	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of rolling budgets and the potential benefits and drawbacks of such an approach. The explanation lacks clarity, depth and application to the scenario.	1 – 3
	Level 2	Demonstrates a reasonable understanding of rolling budgets and the potential benefits and drawbacks of such an approach. The explanation lacks some clarity, depth and/or application to the scenario.	4 – 7
	Level 3	Demonstrates a good understanding of rolling budgets and the potential benefits and drawbacks of such an approach. The explanation is mostly clear, comprehensive and applied to the scenario.	8 – 10



**SECTION 3**

**Task (a): Identify** costs and justify cost drivers for each of the activities in Schedule 1 and explain how these cost drivers could be used to help control the cost of these activities.

<b>Trait</b>			
Costs and cost drivers	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Suggests sensible costs and cost drivers for at least one of the activities. The answer lacks clarity, depth, justification and application to the information given.	1 – 3
	Level 2	Suggests sensible costs and cost drivers for at least two of the activities. The answer lacks some clarity, depth, justification and/or application to the information given.	4 – 6
	Level 3	Suggests sensible costs and cost drivers for all three activities. The answer is mostly clear, comprehensive, justified and applied to the information given.	7 – 8
Cost control	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Provides some explanation of how the cost drivers could be used for cost control. The explanation lacks clarity, depth and application to the scenario.	1 – 2
	Level 2	Provides a reasonable explanation of how the cost drivers could be used for cost control. The explanation lacks some clarity, depth and/or application to the scenario.	3 – 4
	Level 3	Provides a good explanation of how the cost drivers could be used for cost control. The explanation is mostly clear, comprehensive and applied to the scenario.	5

**SECTION 3 (continued)**

**Task (b): Explain** the factors to consider when agreeing initial credit terms with direct customers and the actions we will need to take to manage the receivables balances of these customers after we start trading with them.

<b>Trait</b>			
Factors to consider	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of the factors to consider. The explanation lacks clarity, depth and application to the scenario.	1 – 2
	Level 2	Demonstrates a reasonable understanding of the factors to consider. The explanation lacks some clarity, depth and/or application to the scenario.	3 – 4
	Level 3	Demonstrates a good understanding of the factors to consider. The explanation is mostly clear, comprehensive and applied to the scenario.	5 – 6
Actions	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of the actions to take. The explanation lacks clarity, depth and application to the scenario.	1 – 2
	Level 2	Demonstrates a reasonable understanding of the actions to take. The explanation lacks some clarity, depth and/or application to the scenario.	3 – 4
	Level 3	Demonstrates a good understanding of the actions to take. The explanation is mostly clear, comprehensive and applied to the scenario.	5 – 6

**SECTION 4**

**Task (a): Explain** what each of the variances in Schedule 1 means and likely reasons for their occurrence.

<b>Trait</b>			
Variances	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates a technical understanding of at least one of the variances. The explanation lacks clarity and the reasons given may not be drawn from the scenario or be appropriate for the variance.	1 – 2
	Level 2	Demonstrates a technical understanding of at least two of the variances. The explanation lacks some clarity and the reasons given may not be drawn from the scenario or be appropriate for the variance.	3 – 4
	Level 3	Demonstrates a technical understanding of all three variances. The explanation is mostly clear and the reasons given are mostly drawn from the scenario and are appropriate for the variance.	5 – 6

**Task (b): Suggest** three KPIs that would be relevant to monitor the performance of an individual delivery driver. For each KPI, please explain how it would be measured, why it would be appropriate and factors to consider when reviewing performance against target.

<b>Trait</b>			
KPIs	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Suggests at least one appropriate KPI. The explanation of measurement, appropriateness and factors to consider lacks clarity and application to the scenario.	1 – 4
	Level 2	Suggests at least two appropriate KPIs. The explanation of measurement, appropriateness and factors to consider lacks some clarity and/or application to the scenario.	5 – 8
	Level 3	Suggests three appropriate KPIs. The explanation of measurement, appropriateness and factors to consider is mostly clear and applied to the scenario.	9 – 12

**SECTION 4 (continued)**

**Task (c): Explain**, for each of the costs in Table 1, whether they will be relevant or irrelevant for the purposes of determining whether to accept the one-off contract.

<b>Trait</b>			
Relevant costs	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of the relevant and irrelevant costs. The explanation lacks clarity, depth and reference to the information given.	1 – 2
	Level 2	Demonstrates a reasonable understanding of the relevant and irrelevant costs. The explanation lacks some clarity, depth and/or reference to the information given.	3 – 5
	Level 3	Demonstrates a good understanding of the relevant and irrelevant costs. The explanation is mostly clear, comprehensive and referenced to the information given.	6 – 7

## Operational Level Case Study May & August 2025

### Marking Guidance

#### Variant 2

#### About this marking scheme

This marking scheme has been prepared for the CGMA Professional Qualification Operational Case Study [May 2025 & August 2025].

The indicative answers will show the expected or most orthodox approach; however, the nature of the case study examination tasks means that a range of responses will be valid. The descriptors within this level-based marking scheme are holistic and can accommodate a range of acceptable responses.

General marking guidance is given below, and markers are subject to extensive training, standardisation activities and ongoing monitoring to ensure that judgements are made correctly and consistently.

Care must be taken not to make too many assumptions about future marking schemes on the basis of this document. While the guiding principles remain constant, details may change depending on the content of a particular case study examination form.

#### General marking guidance

- Marking schemes should be applied positively, with candidates rewarded for what they have demonstrated and not penalised for omissions.
- All marks on the scheme are designed to be awarded and full marks should be awarded when all level descriptor criteria are met.
- The marking scheme and indicative answers are provided as a guide to markers. They are not intended to be exhaustive and other valid approaches must be rewarded. Equally, students do not have to make all of the points mentioned in the indicative answers to receive the highest level of the marking scheme.
- An answer which does not address the requirements of the task must be awarded no marks. Markers should mark according to the marking scheme and not their perception of where the passing standard may lie.

Where markers are in doubt as to the application of the marking scheme to a particular candidate script, they must contact their lead marker.

#### How to use this levels-based marking scheme

##### 1. Read the candidate's response in full

##### 2. Select the level

For each trait in the marking scheme, read each level descriptor and select one, using a best-fit approach.

- The response does not need to meet all of the criteria of the level descriptor – it should be placed at the level where it meets more of the criteria of this level than the criteria of the other levels.
- If the work fits more than one level, judge which one provides the best match.

- If the work is on the borderline between two levels, then it should be placed either at the top of the lower band or the bottom of the higher band, depending on where it fits best.

### 3. Select a mark within the level

- Once you have selected the level, you will need to choose the mark to apply.
- A small range of marks may be given at each level. You will need to use your professional judgement to decide which mark to allocate.
- If the answer is of high quality and convincingly meets the requirements of the level, then you should award the highest mark available. If not, then you should award a lower mark within the range available, making a judgement on the overall quality of the answer in relation to the level descriptor.

### Summary of the core activities tested within each sub-task

Sub-task	Core activity		Sub-task weighting (% section time)
Section 1			
(a)	B	Prepare budget information and assess its use for planning and control purposes.	36%
(b)	B	Prepare budget information and assess its use for planning and control purposes.	32%
(c)	F	Prepare information to manage working capital.	32%
Section 2			
(a)	E	Prepare information to support short-term decision making.	32%
(b)	E	Prepare information to support short-term decision making.	36%
(c)	E	Prepare information to support short-term decision making.	32%
Section 3			
(a)	A	Prepare costing information for different purposes to meet the needs of management.	32%
(b)	A	Prepare costing information for different purposes to meet the needs of management.	32%
(c)	D	Apply relevant financial reporting standards and corporate governance, ethical and tax principles.	36%
Section 4			
(a)	C	Analyse performance using financial and non-financial information.	40%
(b)	C	Analyse performance using financial and non-financial information.	36%
(c)	D	Apply relevant financial reporting standards and corporate governance, ethical and tax principles.	24%



**SECTION 1**

**Task (a): Explain** what Chart 1 shows us about sales of gluten-free bread products in Keeland and how to determine a trend line and seasonal variations based on all of the data used in Chart 1.

<b>Trait</b>			
Trend and seasonal	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of what Chart 1 shows and how to determine a trend line and seasonal variations. The explanation lacks clarity, depth and reference to the information in the chart.	1 – 3
	Level 2	Demonstrates a reasonable understanding of what Chart 1 shows and how to determine a trend line and seasonal variations. The explanation lacks some clarity, depth and/or reference to the information in the chart.	4 – 6
	Level 3	Demonstrates a good understanding of what Chart 1 shows and how to determine a trend line and seasonal variations. The explanation is mostly clear, comprehensive and referenced to the information in the chart.	7 – 9

**Task (b): Explain** the validity of a forecast of sales volume for the new GF@Halfpenny range based on this trend line and these seasonal variations.

<b>Trait</b>			
Sales forecast validity	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Provides a limited explanation of the validity of a sales forecast based on this trend line and seasonal variations. The explanation lacks clarity, depth and application to the scenario.	1 – 3
	Level 2	Provides a reasonable explanation of the validity of a sales forecast based on this trend line and seasonal variations. The explanation lacks some clarity, depth and/or application to the scenario.	4 – 6
	Level 3	Provides a good explanation of the validity of a sales forecast based on this trend line and seasonal variations. The explanation is mostly clear, comprehensive and applied to the scenario.	7 – 8

**Task (c): Explain** the factors to be considered when choosing how to invest these funds short term, with reference to possible types of investment.

<b>Trait</b>			
Short-term investing	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Explains at least one factor to consider. The explanation lacks clarity, depth and reference to the scenario.	1 – 3
	Level 2	Explains at least two factors to consider. The explanation lacks some clarity, depth and/or reference to the scenario.	4 – 6
	Level 3	Explains at least three factors to consider. The explanation is mostly clear, comprehensive and referenced to the scenario.	7 – 8

**SECTION 2**

**Task (a): Explain** Chart 1 and what it tells us about fixed costs, budgeted profit, variable cost per unit and break-even position for the above options.

<b>Trait</b>			
Chart 1	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Explains some aspects of what Chart 1 shows. The explanation lacks clarity, technical accuracy and reference to the information in the chart.	1 – 3
	Level 2	Explains many aspects of what Chart 1 shows. The explanation lacks some clarity, technical accuracy and reference to the information in the chart.	4 – 6
	Level 3	Explains most aspects of what Chart 1 shows. The explanation is mostly clear, technically accurate and referenced to the information in the chart.	7 – 8

**Task (b): Explain** the benefits and limitations of this break-even analysis.

<b>Trait</b>			
Benefits and limitations	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Provides some explanation of the benefits and/or limitations of this break-even analysis. The explanation lacks clarity, depth and reference to the information given.	1 – 3
	Level 2	Provides a reasonable explanation of the benefits and/or limitations of this break-even analysis. The explanation lacks some clarity, depth and/or reference to the information given.	4 – 6
	Level 3	Provides a good explanation of the benefits and limitations of this break-even analysis. The explanation is mostly clear, comprehensive and referenced to the information given.	7 – 9

**Task (c): Explain** the other factors to be considered when deciding whether to outsource some or all production of the GF@Halfpenny range.

<b>Trait</b>			
Other factors	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Provides some explanation of the other factors to consider. The explanation lacks clarity, depth and reference to the information given.	1 – 3
	Level 2	Provides a reasonable explanation of the other factors to consider. The explanation lacks some clarity, depth and/or reference to the information given.	4 – 6
	Level 3	Provides a good explanation of the other factors to consider. The explanation is mostly clear, comprehensive and referenced to the information given.	7 – 8

**SECTION 3**

**Task (a): Explain** the nature and cost behaviour of each type of future cost associated with the app.

<b>Trait</b>			
Future costs	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of the nature and cost behaviour of the future costs. The explanation lacks clarity, technical accuracy and application to the scenario.	1 – 3
	Level 2	Demonstrates a reasonable understanding of the nature and cost behaviour of the future costs. The explanation lacks some clarity, technical accuracy and/or application to the scenario.	4 – 6
	Level 3	Demonstrates a good understanding of the nature and cost behaviour of the future costs. The explanation is mostly clear, technically accurate and applied to the scenario.	7 – 8

**Task (b): Explain** how to establish a cost per subscriber to the app and the difficulties associated with doing this.

<b>Trait</b>			
Cost per subscriber	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Provides some explanation of how to establish a cost per subscriber to the app and the difficulties with doing this. The explanation lacks clarity, depth and application to the scenario.	1 – 3
	Level 2	Provides a reasonable explanation of how to establish a cost per subscriber to the app and the difficulties with doing this. The explanation lacks some clarity, depth and/or application to the scenario.	4 – 6
	Level 3	Provides a good explanation of how to establish a cost per subscriber to the app and the difficulties with doing this. The explanation is mostly clear, comprehensive and applied to the scenario.	7 – 8

**SECTION 3 (continued)**

**Task (c): Explain** how the property-related expenditure in Table 1 will be recognised and then initially and subsequently measured in our financial statements for the year ending 31 December 2025.

<b>Trait</b>			
Property	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of how the property-related expenditure will be recognised and then initially and subsequently measured. The explanation lacks clarity, technical accuracy, depth and reference to the information given.	1 – 3
	Level 2	Demonstrates a reasonable understanding of how the property-related expenditure will be recognised and then initially and subsequently measured. The explanation lacks some clarity, technical accuracy, depth and/or reference to the information given.	4 – 6
	Level 3	Demonstrates a good understanding of how the property-related expenditure will be recognised and then initially and subsequently measured. The explanation is mostly clear, technically accurate, comprehensive and referenced to the information given.	7 – 9

**SECTION 4**

**Task (a): Explain** what the variances in Table 1 mean, possible reasons for their occurrence and what the variances indicate about overall sales performance of the GF@Halfpenny White Loaf in the period.

<b>Trait</b>			
Variances	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Explains with technical accuracy the meaning of at least one type of variance. The explanation lacks clarity and the reasons given might not be appropriate or be drawn from the scenario. There is likely to be no consideration of overall sales performance.	1 – 3
	Level 2	Explains with technical accuracy the meaning of at least two types of variance. The explanation lacks some clarity and the reasons given might not always be appropriate or be drawn from the scenario. There may not be any consideration of overall sales performance	4 – 7
	Level 3	Explains with technical accuracy the meaning of all three types of variance. The explanation is mostly clear and the reasons given are mostly appropriate and drawn from the scenario. There is consideration of overall sales performance.	8 – 10

**SECTION 4 (continued)**

**Task (b): Suggest** three KPIs that can be used to monitor the usage of the subscription app. Please explain how each KPI would be measured and why it would be appropriate

<b>Trait</b>			
KPIs	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Suggests at least one appropriate KPI. The explanation of measurement and appropriateness lacks clarity and application to the scenario.	1 – 3
	Level 2	Suggests at least two appropriate KPIs. The explanation of measurement and appropriateness lacks some clarity and/or application to the scenario.	4 – 6
	Level 3	Suggests three appropriate KPIs. The explanation of measurement and appropriateness is mostly clear and applied to the scenario.	7 – 9

**Task (c): Explain** how the issues detailed in Table 2 will affect the financial statements for the year ended 31 December 2025.

<b>Trait</b>			
Issues	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Explains with some technical accuracy how at least one of the issues will affect the financial statements. The explanation lacks clarity and reference to the information given.	1 – 2
	Level 2	Explains with technical accuracy how at least one of the issues will affect the financial statements. The explanation lacks some clarity and/or reference to the information given.	3 – 4
	Level 3	Explains with technical accuracy how both issues will affect the financial statements. The explanation is mostly clear and referenced to the information given.	5 – 6



## Operational Level Case Study May 2025 & August 2025

### Marking Guidance

#### Variant 3

##### About this marking scheme

This marking scheme has been prepared for the CGMA Professional Qualification Operational Case Study [May 2025 & August 2025].

The indicative answers will show the expected or most orthodox approach; however, the nature of the case study examination tasks means that a range of responses will be valid. The descriptors within this level-based marking scheme are holistic and can accommodate a range of acceptable responses.

General marking guidance is given below, and markers are subject to extensive training, standardisation activities and ongoing monitoring to ensure that judgements are made correctly and consistently.

Care must be taken not to make too many assumptions about future marking schemes on the basis of this document. While the guiding principles remain constant, details may change depending on the content of a particular case study examination form.

##### General marking guidance

- Marking schemes should be applied positively, with candidates rewarded for what they have demonstrated and not penalised for omissions.
- All marks on the scheme are designed to be awarded and full marks should be awarded when all level descriptor criteria are met.
- The marking scheme and indicative answers are provided as a guide to markers. They are not intended to be exhaustive and other valid approaches must be rewarded. Equally, students do not have to make all of the points mentioned in the indicative answers to receive the highest level of the marking scheme.
- An answer which does not address the requirements of the task must be awarded no marks. Markers should mark according to the marking scheme and not their perception of where the passing standard may lie.  
Where markers are in doubt as to the application of the marking scheme to a particular candidate script, they must contact their lead marker.

##### How to use this levels-based marking scheme

###### 1. Read the candidate's response in full

###### 2. Select the level

- For each trait in the marking scheme, read each level descriptor and select one, using a best-fit approach.

- The response does not need to meet all of the criteria of the level descriptor – it should be placed at the level where it meets more of the criteria of this level than the criteria of the other levels.
- If the work fits more than one level, judge which one provides the best match.
- If the work is on the borderline between two levels, then it should be placed either at the top of the lower band or the bottom of the higher band, depending on where it fits best.

### 3. Select a mark within the level

- Once you have selected the level, you will need to choose the mark to apply.
- A small range of marks may be given at each level. You will need to use your professional judgement to decide which mark to allocate.
- If the answer is of high quality and convincingly meets the requirements of the level, then you should award the highest mark available. If not, then you should award a lower mark within the range available, making a judgement on the overall quality of the answer in relation to the level descriptor.

### Summary of the core activities tested within each sub-task

Sub-task	Core activity		Sub-task weighting (% section time)
Section 1			
(a)	B	Prepare budget information and assess its use for planning and control purposes.	44%
(b)	E	Prepare information to support short-term decision making.	56%
Section 2			
(a)	B	Prepare budget information and assess its use for planning and control purposes.	32%
(b)	C	Analyse performance using financial and non-financial information.	36%
(c)	F	Prepare information to manage working capital.	32%
Section 3			
(a)	C	Analyse performance using financial and non-financial information.	40%
(b)	A	Prepare costing information for different purposes to meet the needs of management.	60%
Section 4			
(a)	D	Apply relevant financial reporting standards and corporate governance, ethical and tax principles.	40%
(c)	D	Apply relevant financial reporting standards and corporate governance, ethical and tax principles.	32%
(d)	E	Prepare information to support short-term decision making.	28%

**SECTION 1**

**Task (a): Explain**, using the information in Table 1, the differing impacts on the budgeted contribution and profit of the 10% independent adverse changes to selling price, cost of flour and sales volume.

<b>Trait</b>			
Contribution and profit	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of the impact on contribution and/or profit of the changes to selling price, volume and cost of flour. The explanation lacks clarity, depth and reference to the scenario or the information given.	1 – 4
	Level 2	Demonstrates a reasonable understanding of the impact on contribution and/or profit of the changes to selling price, volume and cost of flour. The explanation may lack some clarity, depth and/or reference to the scenario or the information given.	5 – 8
	Level 3	Demonstrates a good understanding of the impact on contribution and profit of the changes to selling price, volume and cost of flour. The explanation is clear, comprehensive and refers to the scenario and the information given.	9 – 11

**Task (b): Explain** the situation represented by each of the five points, A to E, shown on Graph 1 and the factors we need to consider in relation to output, resources and profits at those points.

<b>Trait</b>			
Linear programming	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of the points on the graph and/or the factors which need to be considered. The explanation lacks clarity, depth and reference to the scenario or the information given.	1 – 5
	Level 2	Demonstrates a reasonable understanding of the points on the graph and/or the factors which need to be considered. The explanation may lack some clarity, depth and/or reference to the scenario or the information given.	6 – 10
	Level 3	Demonstrates a good understanding of the points on the graph and the factors which need to be considered. The explanation is clear, comprehensive and refers to the scenario and the information given.	11 – 14

**SECTION 2**

**Task (a): Explain** how planning and control of flour costs within the budgeting process can be improved by using big data and artificial intelligence.

<b>Trait</b>			
Big data & AI	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of how planning and/or control of flour costs can be improved using big data and artificial intelligence. The explanation lacks clarity, depth and reference to the scenario or the information given.	1 – 3
	Level 2	Demonstrates a reasonable understanding of how planning and/or control of flour costs can be improved using big data and artificial intelligence. The explanation may lack some clarity, depth and/or reference to the scenario or the information given.	4 – 6
	Level 3	Demonstrates a good understanding of how planning and control of flour costs can be improved using big data and artificial intelligence. The explanation is clear, comprehensive and refers to the scenario and the information given.	7 – 8

**Task (b): Suggest** three KPIs for monitoring production cost and volumes. Explain how each of these would be calculated and why they would be appropriate.

<b>Trait</b>			
KPIs	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Identifies at least one KPI which is relevant for monitoring production cost and volumes, but the calculation method and appropriateness explanation is missing or not clear.	1 – 3
	Level 2	Identifies at least two KPIs which are relevant for monitoring production cost and volumes, but the calculation methods and appropriateness explanation lacks some clarity and/or depth.	4 – 6
	Level 3	Identifies three KPIs which are relevant for monitoring production cost and volumes that are well explained, including details of how they would be calculated and why they would be appropriate.	7 – 9

**SECTION 2 (continued)**

**Task (c): Explain**, using Table 1, what moving to a more aggressive working capital policy will mean for us.

<b>Trait</b>			
Working capital policy	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of what a move to an aggressive working capital policy will mean. The explanation lacks clarity, depth and application to the specific scenario/reference to the information given.	1 – 3
	Level 2	Demonstrates a reasonable understanding of what a move to an aggressive working capital policy will mean. The explanation may lack some clarity and/or depth and application to the specific scenario/reference to the information given.	4 – 6
	Level 3	Demonstrates a good understanding what a move to an aggressive working capital policy will mean. The explanation is mostly clear and comprehensive. There is application to the specific scenario and reference to the information given.	7 – 8

**SECTION 3**

**Task (a): Explain** what the variances in Schedule 1 mean, possible reasons for their occurrence and what they indicate about production performance in the Baking Department.

<b>Trait</b>			
Fixed overhead variances	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of fixed overhead variances. The explanation lacks clarity, depth and application to the specific scenario/reference to the information given.	1 – 3
	Level 2	Demonstrates a reasonable understanding of fixed overhead variances. There is some application to the specific scenario and/or some reference to the information given in the explanation.	4 – 7
	Level 3	Demonstrates a good understanding of fixed overhead variances. There is application to the specific scenario and reference to the information given in the explanation.	8 – 10

**Task (b): Explain** how the CGMA cost transformation model in Graphic 1 could be applied in our business as a framework to maintain our profitability.

<b>Trait</b>			
CGMA Transformation model	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of how the CGMA cost transformation model could be used as a framework to maintain profitability. The explanation lacks clarity, depth and application to the specific scenario/reference to the information given.	1 – 5
	Level 2	Demonstrates a reasonable understanding of how the CGMA cost transformation model could be used as a framework to maintain profitability. The explanation may lack some clarity and/or depth and application to the specific scenario/reference to the information given.	6 – 10
	Level 3	Demonstrates a good understanding how the CGMA cost transformation model could be used as a framework to maintain profitability. The explanation is mostly clear and comprehensive. There is application to the specific scenario and reference to the information given.	11 – 15



**SECTION 4**

**Task (a): Explain**, based on the information in Schedule 1, how Oven B and the new oven will be recorded in the financial statements for the year ended 31 December 2025.

<b>Trait</b>			
Oven B	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some technical understanding of how Oven B should be recorded in the financial statements. Explanations lack clarity, depth and reference to the scenario, or the information given.	1 – 2
	Level 2	Demonstrates a reasonable technical understanding of how Oven B should be recorded in the financial statements. Explanations may lack clarity, depth and/or reference to the scenario, or the information given.	3 – 4
	Level 3	Demonstrates a good technical understanding of how Oven B should be recorded in the financial statements. The explanations given are clear, comprehensive and refers to the scenario and the information given.	5
New oven	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some technical understanding of how the new oven should be recorded in the financial statements. Explanations lack clarity, depth and reference to the scenario, or the information given.	1 – 2
	Level 2	Demonstrates a reasonable technical understanding of how the new oven should be recorded in the financial statements. Explanations may lack clarity, depth and/or reference to the scenario, or the information given.	3 – 4
	Level 3	Demonstrates a good technical understanding of how the new oven should be recorded in the financial statements. The explanations given are clear, comprehensive and refers to the scenario and the information given.	5

**SECTION 4 (continued)**

**Task (b): Explain** how the issues in Schedule 2 will affect the financial statements for the year ended 31 December 2025.

<b>Trait</b>			
Issues	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some technical understanding of at least one of the two scenarios and how this will affect the financial statements. The explanation lacks clarity, depth and application to the specific scenario/reference to the information given.	1 – 3
	Level 2	Demonstrates a reasonable technical understanding of how at least one of the two scenarios will affect the financial statements. The explanation may lack some clarity and/or depth and application to the specific scenario/reference to the information given.	4 – 6
	Level 3	Demonstrates a reasonable technical understanding of both scenarios. The explanation is mostly clear and comprehensive. There is application to the specific scenario and reference to the information given.	7 – 8

**Task (c): Explain** how the information in Schedule 3 can be used to help us decide which level of additional production to choose using maximax, maximin and minmax criteria and identify any conflicts that could arise.

<b>Trait</b>			
Payoff table	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of how the information can be used to determine the level of output to choose. The explanation lacks clarity, depth and application to the specific scenario/reference to the information given and does not identify any conflicts which could arise.	1 – 2
	Level 2	Demonstrates a reasonable understanding of how the information can be used to determine the level of output to choose. The explanation may lack some clarity and/or depth and application to the specific scenario/reference to the information given. There is an attempt to identify conflicts which could arise.	3 – 5
	Level 3	Demonstrates a good understanding of how the information can be used to determine the level of output to choose. The issues and conflicts to be considered are integral to the answer. The explanation is mostly clear and comprehensive. There is application to the specific scenario and reference to the information given.	6 – 7

## Operational Level Case Study May 2025 & August 2025

### Marking Guidance

#### Variant 4

#### About this marking scheme

This marking scheme has been prepared for the CGMA Professional Qualification Operational Case Study [May 2025 & August 2025].

The indicative answers will show the expected or most orthodox approach; however, the nature of the case study examination tasks means that a range of responses will be valid. The descriptors within this level-based marking scheme are holistic and can accommodate a range of acceptable responses.

General marking guidance is given below; markers are subject to extensive training, standardisation activities and ongoing monitoring to ensure that judgements are being made correctly and consistently.

Care must be taken not to make too many assumptions about future marking schemes on the basis of this document. While the guiding principles remain constant, details may change depending on the content of a particular case study examination form.

#### General marking guidance

- Marking schemes should be applied positively, with candidates rewarded for what they have demonstrated and not penalised for omissions.
- All marks on the scheme are designed to be awarded and full marks should be awarded when all level descriptor criteria are met.
- The marking scheme and indicative answers are provided as a guide to markers. They are not intended to be exhaustive and other valid approaches must be rewarded. Equally, students do not have to make all of the points mentioned in the indicative answers to receive the highest level of the marking scheme.
- An answer which does not address the requirements of the task must be awarded no marks. Markers should mark according to the marking scheme and not their perception of where the passing standard may lie. Where markers are in doubt as to the application of the marking scheme to a particular candidate script, they must contact their lead marker.

#### How to use this levels-based marking scheme

##### **1. Read the candidate's response in full**

##### **2. Select the level**

- For each trait in the marking scheme, read each level descriptor and select one, using a best-fit approach.

- The response does not need to meet all of the criteria of the level descriptor – it should be placed at the level where it meets more of the criteria of this level than the criteria of the other levels.
- If the work fits more than one level, judge which one provides the best match.
- If the work is on the borderline between two levels, then it should be placed either at the top of the lower band or the bottom of the higher band, depending on where it fits best.

### 3. Select a mark within the level

- Once you have selected the level, you will need to choose the mark to apply.
- A small range of marks may be given at each level. You will need to use your professional judgement to decide which mark to allocate.
- If the answer is of high quality and convincingly meets the requirements of the level, then you should award the highest mark available. If not, then you should award a lower mark within the range available, making a judgement on the overall quality of the answer in relation to the level descriptor.

### Summary of the core activities tested within each sub-task

Sub-task	Core activity		Sub-task weighting (% section time)
Section 1			
(a)	F	Prepare information to manage working capital.	32%
(b)	E	Prepare information to support short-term decision making.	52%
(c)	E	Prepare information to support short-term decision making.	16%
Section 2			
(a)	A	Prepare costing information for different purposes to meet the needs of management.	40%
(b)	A	Prepare costing information for different purposes to meet the needs of management.	20%
(c)	B	Prepare budget information and assess its use for planning and control purposes.	40%
Section 3			
(a)	C	Analyse performance using financial and non-financial information.	52%
(b)	B	Prepare budget information and assess its use for planning and control purposes.	48%
Section 4			
(a)	D	Apply relevant financial reporting standards and corporate governance, ethical and tax principles.	32%
(b)	D	Apply relevant financial reporting standards and corporate governance, ethical and tax principles.	20%
(c)	C	Analyse performance using financial and non-financial information.	48%

**SECTION 1**

**Task (a): Explain** the issues we should consider when granting credit to Organica, including any additional information required. Please also discuss the usefulness of the report and letter that Organica sent to support its application.

<b>Trait</b>			
Credit limits	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	<b>Level 1</b>	Demonstrates some understanding of the issues to consider and the usefulness of the information provided. The explanation and discussion lacks clarity, depth and application to the specific scenario/reference to the information given.	1 – 3
	<b>Level 2</b>	Demonstrates a reasonable understanding of the issues to consider and the usefulness of the information provided. The explanation and discussion may lack some clarity, depth and/or application to the specific scenario/reference to the information given.	4 – 6
	<b>Level 3</b>	Demonstrates a good understanding of the issues to consider and the usefulness of the information provided. The explanation and discussion is mostly clear and comprehensive. There is application to the specific scenario and reference to the information given.	7 – 8

**SECTION 1 continued**

**Task (b): Explain** how to identify relevant costs and why each of the cost items shown in Table 1 is either relevant or irrelevant for the decision about subcontracting the promotional campaign.

<b>Trait</b>			
Relevant costs	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	<b>Level 1</b>	Demonstrates some understanding of relevant costs. Some of the costs have been correctly identified as relevant or irrelevant, although the explanation of why this is the case may be missing.	1 – 4
	<b>Level 2</b>	Demonstrates an understanding of relevant costs. Most of the costs are likely to have been correctly identified as relevant or irrelevant, although the explanation of why this is the case may sometimes be missing.	5 – 9
	<b>Level 3</b>	Demonstrates a good understanding of relevant costs. Most, if not all of the costs, have been correctly identified as relevant or irrelevant. For the most part, the explanation of why this is the case is valid.	10 – 13

**Task (c): Explain** two non-financial factors we should consider before making this decision.

<b>Trait</b>			
Non-financial factors	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	<b>Level 1</b>	Provides at least one suitable non-financial factor. The explanation lacks clarity, depth and reference to the scenario.	1
	<b>Level 2</b>	Provides at least one suitable non-financial factor. The explanation may lack some clarity, depth and/or reference to the scenario.	2 – 3
	<b>Level 3</b>	Provides two suitable non-financial factors. The explanation is clear, comprehensive and refers to the scenario.	4

**SECTION 2**

**Task (a): Explain** throughput accounting and the ratios I have prepared to help prioritise production until the problem with the drive mechanisms is rectified.

<b>Trait</b>			
Throughput accounting	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of throughput accounting and the ratios. The explanation lacks clarity, depth and reference to the information given.	1 – 3
	Level 2	Demonstrates a reasonable understanding of throughput accounting and the ratios. The explanation may lack some clarity, depth and/or reference to the information given.	4 – 7
	Level 3	Demonstrates a good understanding of throughput accounting and the ratios. The explanation is mostly clear and comprehensive. There is reference to the information given.	8 - 10



**SECTION 2 continued**

**Task (b): Explain** the suitability of throughput accounting for production planning at Halfpenny.

<b>Trait</b>			
Suitability	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of the suitability of throughput accounting for production planning at Halfpenny. The explanation lacks clarity, depth and application to the scenario.	1 – 2
	Level 2	Demonstrates a reasonable understanding of the suitability of throughput accounting for production planning at Halfpenny. The explanation may lack some clarity, depth and/or application to the scenario.	3 – 4
	Level 3	Demonstrates a good understanding of the suitability of throughput accounting for production planning at Halfpenny. The explanation is mostly clear and comprehensive. There is application to the scenario.	5

**Task (c): Explain** the potential benefits for Halfpenny of using big data and AI when setting sales budgets.

<b>Trait</b>			
Sales budgets	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of the potential benefits. The explanation lacks clarity, depth and reference to the scenario.	1 – 3
	Level 2	Demonstrates a reasonable understanding of the potential benefits. The explanation may lack some clarity, depth and/or reference to the scenario.	4 – 7
	Level 3	Demonstrates a good understanding of the potential benefits. The explanation is clear, comprehensive and refers to the scenario.	8 – 10

**SECTION 3**

**Task (a): Explain** each of the variances in Schedule 1, the possible reasons for their occurrence and what they indicate about production performance in the Mixing & Kneading Department.

<b>Trait</b>			
Overhead variances	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	<b>Level 1</b>	Demonstrates some technical understanding of the variances. The explanation of the variances and possible reasons lacks clarity, depth and reference to the information given. Little, if any, consideration of performance.	1 – 4
	<b>Level 2</b>	Demonstrates a reasonable technical understanding of the variances. The explanation of the variances and possible reasons may lack some clarity, depth and/or reference to the information given. There is limited consideration of performance.	5 – 9
	<b>Level 3</b>	Demonstrates a good technical understanding of the variances. The explanation of the variances and possible reasons is mostly clear, comprehensive and referenced to the information given. There is consideration of performance.	10 – 13

**SECTION 3 continued**

**Task (b): Explain** the difference between feed back and feed forward control and how feed forward control reports may help control production at Halfpenny.

<b>Trait</b>			
Feed back vs feed forward	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some technical understanding of the difference between feed back and feed forward control. The explanation lacks clarity, depth and reference to the scenario.	1 – 2
	Level 2	Demonstrates a reasonable technical understanding of the difference between feed back and feed forward control. The explanation may lack some clarity, depth and/or reference to the scenario.	3 – 4
	Level 3	Demonstrates a good technical understanding of the difference between feed back and feed forward control. The explanation is clear, comprehensive and refers to the scenario.	5 – 6
Control production	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of how feed forward reports may help control production. The explanation lacks clarity, depth and reference to the scenario.	1 – 2
	Level 2	Demonstrates a reasonable understanding of how feed forward reports may help control production. The explanation may lack some clarity, depth and/or reference to the scenario.	3 – 4
	Level 3	Demonstrates a good understanding of how feed forward reports may help control production. The explanation is clear, comprehensive and refers to the scenario.	5 – 6

**SECTION 4**

**Task (a): Explain** how the damage to the assets shown in Table 1 should be reflected in the financial statements for the year ending 31 December 2025.

<b>Trait</b>			
Damaged assets	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	<b>Level 1</b>	Demonstrates some technical understanding of how the assets should be reflected in the financial statements. The explanation lacks clarity, depth and reference to the information given.	1 – 3
	<b>Level 2</b>	Demonstrates a reasonable technical understanding of how the assets should be reflected in the financial statements. The explanation may lack clarity, depth and/or reference to the information given.	4 – 6
	<b>Level 3</b>	Demonstrates a good technical understanding of how the assets should be reflected in the financial statements. The explanation is clear, comprehensive and refers to the information given.	7 – 8

**Task (b): Explain** how, with reference to IAS 16: Property, Plant and Equipment, each of the costs of the new freezer unit in Schedule 1 should be reflected in the financial statements for the year ending 31 December 2025.

<b>Trait</b>			
IAS 16	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	<b>Level 1</b>	Demonstrates some technical understanding of how the asset costs should be reflected in the financial statements. The explanation lacks clarity, depth and reference to the information given.	1 – 2
	<b>Level 2</b>	Demonstrates a reasonable technical understanding of how the asset costs should be reflected in the financial statements. The explanation may lack some clarity, depth and/or reference to the information given.	3 – 4
	<b>Level 3</b>	Demonstrates a good technical understanding of how the asset costs should be reflected in the financial statements. The explanation is clear, comprehensive and refers to the information given.	5

**SECTION 4 continued**

**Task (c): Suggest** four performance measures and explain how each of them would be calculated and why they would be appropriate for measuring the performance of individual sales staff.

<b>Trait</b>			
Performance measures	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	<b>Level 1</b>	Identifies at least one performance measure which is relevant for measuring individual sales staff performance, but the calculation method and appropriate explanation is missing or not clear.	1 – 4
	<b>Level 2</b>	Identifies at least two performance measures which are relevant for measuring individual sales staff performance, but the calculation methods and appropriate explanation lacks some clarity and/or depth.	5 – 8
	<b>Level 3</b>	Identifies at least three performance measures that are wholly appropriate for measuring individual sales staff performance, which are appropriate and well explained, including details of how they would be calculated.	9 – 12

## Operational Level Case Study May & August 2025

### Marking Guidance

#### Variant 5

#### About this marking scheme

This marking scheme has been prepared for the CGMA Professional Qualification Operational Case Study [May 2025 & August 2025].

The indicative answers will show the expected or most orthodox approach; however, the nature of the case study examination tasks means that a range of responses will be valid. The descriptors within this level-based marking scheme are holistic and can accommodate a range of acceptable responses.

General marking guidance is given below; markers are subject to extensive training, standardisation activities and ongoing monitoring to ensure that judgements are being made correctly and consistently.

Care must be taken not to make too many assumptions about future marking schemes on the basis of this document. While the guiding principles remain constant, details may change depending on the content of a particular case study examination form.

#### General marking guidance

- Marking schemes should be applied positively, with candidates rewarded for what they have demonstrated and not penalised for omissions.
- All marks on the scheme are designed to be awarded and full marks should be awarded when all level descriptor criteria are met.
- The marking scheme and indicative answers are provided as a guide to markers. They are not intended to be exhaustive and other valid approaches must be rewarded. Equally, students do not have to make all of the points mentioned in the indicative answers to receive the highest level of the marking scheme.
- An answer which does not address the requirements of the task must be awarded no marks. Markers should mark according to the marking scheme and not their perception of where the passing standard may lie. Where markers are in doubt as to the application of the marking scheme to a particular candidate script, they must contact their lead marker.

#### How to use this levels-based marking scheme

##### **1. Read the candidate's response in full**

##### **2. Select the level**

- For each trait in the marking scheme, read each level descriptor and select one, using a best-fit approach.

- The response does not need to meet all of the criteria of the level descriptor – it should be placed at the level where it meets more of the criteria of this level than the criteria of the other levels.
- If the work fits more than one level, judge which one provides the best match.
- If the work is on the borderline between two levels, then it should be placed either at the top of the lower band or the bottom of the higher band, depending on where it fits best.

### 3. Select a mark within the level

- Once you have selected the level, you will need to choose the mark to apply.
- A small range of marks may be given at each level. You will need to use your professional judgement to decide which mark to allocate.
- If the answer is of high quality and convincingly meets the requirements of the level, then you should award the highest mark available. If not, then you should award a lower mark within the range available, making a judgement on the overall quality of the answer in relation to the level descriptor.

### Summary of the core activities tested within each sub-task

Sub-task	Core activity		Sub-task weighting (% section time)
Section 1			
(a)	C	Analyse performance using financial and non-financial information.	52%
(b)	A	Prepare costing information for different purposes to meet the needs of management.	48%
Section 2			
(a)	D	Apply relevant financial reporting standards and corporate governance, ethical and tax principles.	32%
(b)	D	Apply relevant financial reporting standards and corporate governance, ethical and tax principles.	32%
(c)	C	Analyse performance using financial and non-financial information.	36%
Section 3			
(a)	B	Prepare budget information and assess its use for planning and control purposes.	32%
(b)	B	Prepare budget information and assess its use for planning and control purposes.	40%
(c)	E	Prepare information to support short-term decision making.	28%
Section 4			
(a)	E	Prepare information to support short-term decision making.	52%
(b)	F	Prepare information to manage working capital.	24%
(c)	F	Prepare information to manage working capital.	24%



**SECTION 1**

**Task (a): Explain** what each of the variances in Table 1 means and possible reasons for their occurrence.

<b>Trait</b>			
Expenditure	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Explains the meaning of one of the expenditure variances with reasonable technical accuracy. The explanation lacks clarity and the reasons given may not be drawn from the scenario or be appropriate for the variance.	1 – 2
	Level 2	Explains the meaning of both the expenditure variances with reasonable technical accuracy. The explanation lacks some clarity and the reasons given may not be drawn from the scenario or be appropriate for the variance.	3 – 4
	Level 3	Explains the meaning of both expenditure variances with good technical accuracy. The explanation is mostly clear and the reasons given are drawn from the scenario and appropriate for the variance.	5 – 6
Efficiency and capacity	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Explains the meaning of either the efficiency or capacity variance with reasonable technical accuracy. The explanation lacks clarity and the reasons given may not be drawn from the scenario or be appropriate for the variance.	1 – 2
	Level 2	Explains the meaning of both the efficiency and capacity variances with reasonable technical accuracy. The explanation lacks some clarity and the reasons given may not be drawn from the scenario or be appropriate for the variance.	3 – 5
	Level 3	Explains the meaning of both the expenditure and capacity variances with good technical accuracy. The explanation is mostly clear and the reasons given are drawn from the scenario and appropriate for the variance.	6 – 7

**SECTION 1 continued**

**Task (b): Explain** the three areas of the CGMA cost transformation model identified above, how these apply to our business and how they could be applied in the future.

<b>Trait</b>			
Cost-conscious	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	<b>Level 1</b>	Explains this area of the model with some technical accuracy. The explanation lacks clarity and application to the scenario.	1
	<b>Level 2</b>	Explains this area of the model with reasonable technical accuracy. The explanation lacks some clarity and/or application to the scenario.	2 – 3
	<b>Level 3</b>	Explains this area of the model with good technical accuracy. The explanation is mostly clear and applied to the scenario.	4
Sustainability	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	<b>Level 1</b>	Explains this area of the model with some technical accuracy. The explanation lacks clarity and application to the scenario.	1
	<b>Level 2</b>	Explains this area of the model with reasonable technical accuracy. The explanation lacks some clarity and/or application to the scenario.	2 – 3
	<b>Level 3</b>	Explains this area of the model with good technical accuracy. The explanation is mostly clear and applied to the scenario.	4
Cost drivers	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	<b>Level 1</b>	Explains this area of the model with some technical accuracy. The explanation lacks clarity and application to the scenario.	1
	<b>Level 2</b>	Explains this area of the model with reasonable technical accuracy. The explanation lacks some clarity and/or application to the scenario.	2 – 3
	<b>Level 3</b>	Explains this area of the model with good technical accuracy. The explanation is mostly clear and applied to the scenario.	4

**SECTION 2**

**Task (a): Explain** how the wind turbine will be recognised and initially measured in our financial statements for the year ending 31 December 2025. Please also explain the impact of the wind turbine on our reported profit for the year ending 31 December 2025.

<b>Trait</b>			
Wind turbine	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some technical understanding of how the wind turbine will be recognised, initially measured and impact profit. The explanation lacks clarity and reference to the information provided.	1 – 3
	Level 2	Demonstrates a reasonable technical understanding of how the wind turbine will be recognised, initially measured and impact profit. The explanation lacks some clarity and/or reference to the information provided.	4 – 6
	Level 3	Demonstrates a good technical understanding of how the wind turbine will be recognised, initially measured and impact profit. The explanation is mostly clear and referenced to the information provided.	7 – 8

**Task (b): Explain** how the old ovens will be classified and measured in our financial statements for the year ending 31 December 2025, assuming that the sale occurs in 2026.

<b>Trait</b>			
Old ovens	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some technical understanding of how the old ovens will be classified and measured. The explanation lacks clarity and reference to the information provided.	1 – 3
	Level 2	Demonstrates a reasonable technical understanding of how the old ovens will be classified and measured. The explanation lacks some clarity and/or reference to the information provided.	4 – 6
	Level 3	Demonstrates a good technical understanding of how the old ovens will be classified and measured. The explanation is mostly clear and referenced to the information provided.	7 – 8

**Task (c): Suggest** three KPIs that are appropriate to monitor the sustainability of the production process. Please explain how each KPI would be measured and why it would be appropriate.

<b>Trait</b>			
KPIs	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Suggests at least one KPI which is appropriate. The explanation of why appropriate and measurement lacks clarity and application to the scenario.	1 – 3
	Level 2	Suggests at least two KPIs which are appropriate. The explanation of why appropriate and measurement lacks some clarity and/or application to the scenario.	4 – 6
	Level 3	Suggests three KPIs which are appropriate. The explanation of why appropriate and measurement is mostly clear and applied to the scenario.	7 – 9

**SECTION 3**

**Task (a): Explain** how a ZBB approach can be applied to create a budget for production employee training costs, including the creation of decision packages, with reference to the information in Schedule 1.

<b>Trait</b>			
ZBB approach	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	<b>Level 1</b>	Demonstrates some understanding of how a ZBB approach can be applied. The explanation lacks clarity, depth and application to the scenario.	1 – 3
	<b>Level 2</b>	Demonstrates a reasonable understanding of how a ZBB approach can be applied. The explanation lacks some clarity, depth and/or application to the scenario.	4 – 6
	<b>Level 3</b>	Demonstrates a good understanding of how a ZBB approach can be applied. The explanation is mostly clear, comprehensive and applied to the scenario.	7 – 8

**Task (b): Explain** the benefits to the business of using a ZBB approach for budgeting support activity costs and any challenges that we might face if we did apply this approach in practice.

<b>Trait</b>			
Benefits	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	<b>Level 1</b>	Explains at least one benefit. The explanation lacks clarity, depth and application to the scenario.	1 – 2
	<b>Level 2</b>	Explains at least one benefit. The explanation lacks some clarity, depth and/or application to the scenario.	3 – 4
	<b>Level 3</b>	Explains at least two benefits. The explanation is mostly clear, comprehensive and applied to the scenario.	5
Challenges	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	<b>Level 1</b>	Explains at least one challenge. The explanation lacks clarity, depth and application to the scenario.	1 – 2
	<b>Level 2</b>	Explains at least one challenge. The explanation lacks some clarity, depth and/or application to the scenario.	3 – 4
	<b>Level 3</b>	Explains at least two challenges. The explanation is mostly clear, comprehensive and applied to the scenario.	5

**SECTION 3 continued**

**Task (c): Explain** whether, in the event of each of the three possible market reactions, it will have been worthwhile paying K\$60,000 for the perfect information, assuming that the SMT made the decision about which promotional campaign to undertake using a risk neutral to the decision.

<b>Trait</b>			
Perfect information	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	<b>Level 1</b>	Demonstrates some understanding of whether it will have been worthwhile. The explanation lacks clarity and reference to the information given.	1 – 2
	<b>Level 2</b>	Demonstrates a reasonable understanding of whether it will have been worthwhile. The explanation lacks some clarity and/or reference to the information given.	3 – 5
	<b>Level 3</b>	Demonstrates a good understanding of whether it would have been worthwhile. The explanation is mostly clear and referenced to the information given.	6 – 7

**SECTION 4**

**Task (a): Explain** Graph 1, how to use the graph to determine the optimal production plan and what that optimal production plan is. Please also explain factors we should consider before proceeding with this production plan.

<b>Trait</b>			
Graph 1	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Explains Graph 1 and how to determine the optimal production plan with some technical accuracy. The explanation lacks clarity and reference to the information given.	1 – 2
	Level 2	Explains Graph 1 and how to determine the optimal production plan with reasonable technical accuracy. The explanation lacks some clarity and/or reference to the information given.	3 – 5
	Level 3	Explains Graph 1 and how to determine the optimal production plan with good technical accuracy. The explanation is mostly clear and referenced to the information given.	6 – 7
Factors	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Explains at least one relevant factor. The explanation lacks clarity and application to the scenario.	1 – 2
	Level 2	Explains at least two relevant factors. The explanation lacks some clarity and/or application to the scenario.	3 – 4
	Level 3	Explains at least three relevant factors. The explanation is mostly clear and applied to the scenario.	5 – 6

**SECTION 4 continued**

**Task (b): Explain** the EOQ model and the information needed to determine the economic order quantity for each type of grain and seed that we purchase.

<b>Trait</b>			
EOQ model	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	<b>Level 1</b>	Demonstrates some understanding of the EOQ model and the information needed. The explanation lacks clarity and reference to the information given.	1 – 2
	<b>Level 2</b>	Demonstrates a reasonable understanding of the EOQ model and the information needed. The explanation lacks some clarity and/or reference to the information given.	3 – 4
	<b>Level 3</b>	Demonstrates a good understanding of the EOQ model and the information needed. The explanation is mostly clear and referenced to the information given.	5 – 6

**Task (c): Explain** the problems associated with the assumptions underpinning the model and how we can overcome these problems by adapting the model.

<b>Trait</b>			
Problems	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	<b>Level 1</b>	Explains at least one problem and how to adapt. The explanation lacks clarity and application to the scenario.	1 – 2
	<b>Level 2</b>	Explains at least two problems and how to adapt. The explanation lacks some clarity and/or application to the scenario.	3 – 4
	<b>Level 3</b>	Explains at least three relevant problems and how to adapt. The explanation is mostly clear and applied to the scenario.	5 – 6



## Operational Level Case Study May 2025 & August 2025

### Marking Guidance

#### Variant 6

##### About this marking scheme

This marking scheme has been prepared for the CGMA Professional Qualification Operational Case Study [May 2025 & August 2025].

The indicative answers will show the expected or most orthodox approach; however, the nature of the case study examination tasks means that a range of responses will be valid. The descriptors within this level-based marking scheme are holistic and can accommodate a range of acceptable responses.

General marking guidance is given below; markers are subject to extensive training, standardisation activities and ongoing monitoring to ensure that judgements are being made correctly and consistently.

Care must be taken not to make too many assumptions about future marking schemes on the basis of this document. While the guiding principles remain constant, details may change depending on the content of a particular case study examination form.

##### General marking guidance

- Marking schemes should be applied positively, with candidates rewarded for what they have demonstrated and not penalised for omissions.
- All marks on the scheme are designed to be awarded and full marks should be awarded when all level descriptor criteria are met.
- The marking scheme and indicative answers are provided as a guide to markers. They are not intended to be exhaustive and other valid approaches must be rewarded. Equally, students do not have to make all of the points mentioned in the indicative answers to receive the highest level of the marking scheme.
- An answer which does not address the requirements of the task must be awarded no marks. Markers should mark according to the marking scheme and not their perception of where the passing standard may lie. Where markers are in doubt as to the application of the marking scheme to a particular candidate script, they must contact their lead marker.

##### How to use this levels-based marking scheme

###### 1. Read the candidate's response in full

###### 2. Select the level

- For each trait in the marking scheme, read each level descriptor and select one, using a best-fit approach.

- The response does not need to meet all of the criteria of the level descriptor – it should be placed at the level where it meets more of the criteria of this level than the criteria of the other levels.
- If the work fits more than one level, judge which one provides the best match.
- If the work is on the borderline between two levels, then it should be placed either at the top of the lower band or the bottom of the higher band, depending on where it fits best.

### 3. Select a mark within the level

- Once you have selected the level, you will need to choose the mark to apply.
- A small range of marks may be given at each level. You will need to use your professional judgement to decide which mark to allocate.
- If the answer is of high quality and convincingly meets the requirements of the level, then you should award the highest mark available. If not, then you should award a lower mark within the range available, making a judgement on the overall quality of the answer in relation to the level descriptor.

### Summary of the core activities tested within each sub-task

Sub-task	Core activity		Sub-task weighting (% section time)
Section 1			
(a)	B	Prepare budget information and assess its use for planning and control purposes.	40%
(b)	A	Prepare costing information for different purposes to meet the needs of management.	28%
(c)	A	Prepare costing information for different purposes to meet the needs of management.	32%
Section 2			
(a)	D	Apply relevant financial reporting standards and corporate governance, ethical and tax principles.	36%
(b)	D	Apply relevant financial reporting standards and corporate governance, ethical and tax principles.	36%
(c)	F	Prepare information to manage working capital.	28%
Section 3			
(a)	C	Analyse performance using financial and non-financial information.	48%
(b)	B	Prepare budget information and assess its use for planning and control purposes.	52%
Section 4			
(a)	C	Analyse performance using financial and non-financial information.	32%
(b)	E	Prepare information to support short-term decision making.	28%
(c)	E	Prepare information to support short-term decision making.	40%

**SECTION 1**

**Task (a): Explain** the benefits of using beyond budgeting, particularly in view of the varying demand volumes and low profit margins seen in contracts, increasing our need to be more responsive.

<b>Trait</b>			
Beyond budgeting	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	<b>Level 1</b>	Demonstrates some understanding of the benefits of using beyond budgeting. The explanation lacks clarity, depth and reference to the scenario.	1 – 3
	<b>Level 2</b>	Demonstrates a reasonable understanding of the benefits of using beyond budgeting. The explanation may lack some clarity, depth and/or reference to the scenario.	4 – 7
	<b>Level 3</b>	Demonstrates a good understanding of the benefits of using beyond budgeting. The explanation is clear, comprehensive and refers to the scenario.	8 – 10

**Task (b): Explain** the types of costs we will see when developing the bread ordering app.

<b>Trait</b>			
App costs	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	<b>Level 1</b>	Demonstrates some understanding of the types of costs we will see when developing the app. The explanation lacks clarity, depth and reference to the scenario.	1 – 2
	<b>Level 2</b>	Demonstrates a reasonable understanding of the types of costs we will see when developing the app. The explanation may lack some clarity, depth and/or reference to the scenario.	3 – 5
	<b>Level 3</b>	Demonstrates a good understanding of the types of costs we will see when developing the app. The explanation is clear, comprehensive and refers to the scenario.	6 – 7

**Task (c): Explain** the future issues and ongoing costs of the bread ordering app we should consider.

<b>Trait</b>			
App issues	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	<b>Level 1</b>	Demonstrates some understanding of the future issues and ongoing costs of the app. The explanation lacks clarity, depth and reference to the scenario.	1 – 3
	<b>Level 2</b>	Demonstrates a reasonable understanding of the future issues and ongoing costs of the app. The explanation may lack some clarity, depth and/or reference to the scenario.	4 – 6
	<b>Level 3</b>	Demonstrates a good understanding of the future issues and ongoing costs of the app. The explanation is clear, comprehensive and refers to the scenario.	7 – 8

**SECTION 2**

**Task (a): Explain**, using Table 1, how the costs of the oven will be recorded in the financial statements for the year ending 31 December 2025.

<b>Trait</b>			
Asset purchase	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	<b>Level 1</b>	Demonstrates some technical understanding of how the costs should be recorded in the financial statements. The explanation lacks clarity, depth and reference to the information given.	1 – 3
	<b>Level 2</b>	Demonstrates a reasonable technical understanding of how the costs should be recorded in the financial statements. The explanation may lack clarity, depth and/or reference to the information given.	4 – 6
	<b>Level 3</b>	Demonstrates a good technical understanding of how the costs should be recorded in the financial statements. The explanation is clear, comprehensive and refers to the information given.	7 – 9

**Task (b): Explain**, using Table 2, how the lease liability and right-of-use asset for the conveyor belt lease should be initially measured in our financial statements.

<b>Trait</b>			
Leased asset	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	<b>Level 1</b>	Demonstrates some technical understanding of how the lease liability and right-of-use asset should be initially measured. The explanation lacks clarity, depth and reference to the information given.	1 – 3
	<b>Level 2</b>	Demonstrates a reasonable technical understanding of how the lease liability and right-of-use asset should be initially measured. The explanation may lack clarity, depth and/or reference to the information given.	4 – 6
	<b>Level 3</b>	Demonstrates a good technical understanding of how the lease liability and right-of-use asset should be initially measured. The explanation is clear, comprehensive and refers to the information given.	7 – 9

**Task (c): Explain**, using the information in Schedule 1, the differences between invoice discounting, factoring and an overdraft.

<b>Trait</b>			
Short-term finance	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	<b>Level 1</b>	Demonstrates some understanding of the differences. The explanation lacks clarity, depth and reference to the information given.	1 – 2
	<b>Level 2</b>	Demonstrates a reasonable understanding of the differences. The explanation may lack clarity, depth and/or reference to the information given.	3 – 5
	<b>Level 3</b>	Demonstrates a good technical understanding of the differences. The explanation is clear, comprehensive and refers to the information given.	6 – 7

**SECTION 3**

**Task (a): Suggest** two KPIs to monitor waste and two KPIs to monitor the effectiveness of the new app. For each KPI, explain how it would be measured and why it would be appropriate.

<b>Trait</b>			
Waste monitoring	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Identifies at least one KPI which is relevant, but the measurement and appropriateness explanation is missing or not clear.	1 – 2
	Level 2	Identifies at least one KPI which is relevant, but the measurement and appropriateness explanation lacks some clarity and/or depth.	3 – 4
	Level 3	Identifies two KPIs which are relevant. They are well explained, including details of how they would be measured and why they would be appropriate.	5 – 6
App effectiveness	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Identifies at least one KPI which is relevant, but the measurement and appropriateness explanation is missing or not clear.	1 – 2
	Level 2	Identifies at least one KPI which is relevant, but the measurement and appropriateness explanation lacks some clarity and/or depth.	3 – 4
	Level 3	Identifies two KPIs which are relevant. They are well explained, including details of how they would be measured and why they would be appropriate.	5 – 6

**SECTION 3 continued**

**Task (b): Explain** how big data and big data analytics may be used to support planning and control in our sales budgets.

<b>Trait</b>			
Planning	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of how planning can be supported by using big data and big data analytics. The explanation lacks clarity, depth and reference to the scenario.	1 – 2
	Level 2	Demonstrates a reasonable understanding of how planning can be supported using big data and big data analytics. The explanation may lack some clarity, depth and/or reference to the scenario.	3 – 4
	Level 3	Demonstrates a good understanding of how planning can be supported using big data and big data analytics. The explanation is clear, comprehensive and refers to the scenario.	5 – 6
Control	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of how control can be supported by using big data and big data analytics. The explanation lacks clarity, depth and reference to the scenario.	1 – 2
	Level 2	Demonstrates a reasonable understanding of how control can be supported using big data and big data analytics. The explanation may lack some clarity, depth and/or reference to the scenario.	3 – 4
	Level 3	Demonstrates a good understanding of how control can be supported using big data and big data analytics. The explanation is clear, comprehensive and refers to the scenario.	5 – 7

**SECTION 4**

**Task (a): Explain** what each of the variances in Table 1 mean, possible reasons for their occurrence and what they indicate about sales performance. Please also explain how suitable they are for reviewing sales of loaves to Fresh Picks.

<b>Trait</b>			
Sales variances	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	<b>Level 1</b>	Demonstrates some understanding of the sales variances. The explanation lacks clarity, depth and reference to the information given.	1 – 3
	<b>Level 2</b>	Demonstrates a reasonable understanding of the sales variances. The explanation lacks some clarity, depth and/or reference to the information given.	4 – 6
	<b>Level 3</b>	Demonstrates a good understanding of the sales variances. The explanation is mostly clear, comprehensive and referenced to the information given.	7 – 8

**Task (b): Explain**, using the information in Table 2, why the Production Director chose the medium output level for Organic Rustic rolls and the impact of that decision.

<b>Trait</b>			
Regret table	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	<b>Level 1</b>	Demonstrates some understanding of minimax regret. The explanation lacks clarity, depth and reference to the information given.	1 – 2
	<b>Level 2</b>	Demonstrates a reasonable understanding of minimax regret. The explanation lacks some clarity, depth and/or reference to the information given.	3 – 5
	<b>Level 3</b>	Demonstrates a good understanding of minimax regret. The explanation is mostly clear, comprehensive and referenced to the information given.	6 – 7

**Task (c): Explain** why each of the items in Table 3 is relevant or irrelevant to the decision about accepting the contract from the Organic Food Festival and if any additional information is required.

<b>Trait</b>			
Relevant costs	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	<b>Level 1</b>	Identifies some of the costs correctly as either relevant or irrelevant. Justification of why lacks clarity, detail and reference to the information given. No consideration of additional information.	1 – 3
	<b>Level 2</b>	Identifies many of the costs correctly as either relevant or irrelevant. Justification of why lacks some clarity, detail and/or reference to the information given. Limited consideration of additional information.	4 – 7
	<b>Level 3</b>	Identifies most of the costs correctly as either relevant or irrelevant. Justification of why is mostly clear, detailed and referenced to the information given. Some consideration of additional information.	8 – 10



## Operational Level Case Study – Examiner’s report

### May-August 2025 exam session

This document should be read in conjunction with the examiner’s suggested answers and marking guidance.

#### General comments

The OCS examinations for May and August 2025 were based on Halfpenny, a company that produces and sells packaged bread. The company is based in Keeland, a small country in Europe where the currency is K\$.

The company was founded in 1891, when the founders Martha and Bert Halfpenny started baking and selling bread and other bakery items. The company grew steadily and in 1952, Joseph Halfpenny, the grandson of the founders invested in what was, at the time, state-of-the-art machinery to slice and package loaves in Halfpenny-branded waxed paper. This innovation coincided with advancements in the ingredients used in bread production, which extended the shelf-life of a bread loaf. Throughout the 1950s, 1960s and 1970s, the company continued to grow steadily.

The early 1980s was a period of rapid growth for the company, principally due to the boom in supermarkets. Increasingly, shoppers wanted the convenience of a single store for all of their food needs and moved away from high streets and small independent grocery stores to supermarkets, which were often in out-of-town locations.

Halfpenny currently produces a range of sliced packaged bread loaves and packaged bread rolls. Until recently, senior management has focused on these core products, continually striving to improve taste, texture and shelf-life. Recently though, as a result of a slowing down in growth, consideration has been given to extending the product range.

Halfpenny is still owned and managed by the Halfpenny family. The latest financial statements for the year ended 31 December 2024 showed revenue of K\$332 million, gross profit of K\$90 million, operating profit of K\$30 million and that the company had 2,208 employees.

Six variants were written based on Halfpenny. The focus of each variant was as follows:

- Variant 1: Starting to direct sell to restaurants and coffee shops
- Variant 2: Launch of a range of gluten-free bread products
- Variant 3: Supplying own-label bread to a customer
- Variant 4: Launch of U-Bake, a frozen part-baked loaf
- Variant 5: Focus on competitiveness and sustainability in the business
- Variant 6: Launch of an organic range of bread

Each variant was based on the OCS case study blueprint and covered all core activities in accordance with the weightings prescribed. A levels-based approach was used for marking candidate answers. Each variant consisted of four tasks and each of these tasks was broken down into between two and four sub-tasks. Each sub-task was then broken down into between one and five traits for marking. For each trait, there was a detailed marking guide which split the total mark available into three levels: level 1, level 2 and level 3. It was also possible to achieve a score of zero for a trait if there was no rewardable material.

For OCS, candidates need to answer the task given to them (not the task that they wanted to given) and demonstrate technical understanding in the context of the scenario and the particulars of the issue being addressed. Information given to candidates as part of the task is there for a reason and should be, as far as possible, incorporated into answers, along with relevant information from the pre-seen. Application to the scenario is key to achieving high level 2 and level 3 scores. Clearly where there are gaps in knowledge, application is not possible and therefore the importance of candidates ensuring that their knowledge base is complete needs to be reiterated. In addition, to score at high level 2 or level 3, answers need to be clear and an explanation or justification rather than a description, identification or simple statement.

### **Candidate performance**

As is usually the case, candidate performance was varied:

- There were some excellent, high scoring answers, where candidates consistently scored at higher level 2 or level 3. These candidates answered the task given and produced answers which demonstrated technical understanding in an applied way by fully utilising the information given in the pre-seen and the unseen materials. These answers were well-structured, with clear and detailed explanations and justifications.
- There were also a sizeable number of poor, low scoring answers, where candidates consistently scored at level 1. As has been the case in previous sessions, most of these candidates attempted to answer all sub-tasks but seemed wholly unprepared for the exam. These answers demonstrated poor technical understanding with limited use of the information given and no or very limited application to the scenario. In addition, these answers lacked clarity and detail.
- As is normal, the majority of candidates were in the mid-range overall. Some of these candidates were mid-range because they had specific gaps in technical knowledge, which meant that they scored poorly on some sub-tasks but did well in other sub-tasks. For most candidates in the mid-range though, answers for sub-tasks were consistently at level 2, usually because of a lack of clarity and detail in answers and/or limited use of the unseen material and limited application to the scenario.

Specific topic areas where many candidates demonstrated good technical understanding included CGMA cost transformation model, IAS 16, decision making with risk, beyond budgeting, rolling budgets, the use of big data and AI for budgeting, limitations of expected value, short-term investing and basic variances (raw materials, direct labour and sales price). The areas where candidates demonstrated a lack of technical understanding included variable overhead variances, sales mix variances, linear programming, costing for an app and the value of perfect information.

There continues to be a lack of depth of explanation or justification in some of the tasks, especially in relation to financial reporting tasks. Remember, an explanation requires more than a short sentence on a point or simple identification of a rule in a financial reporting standard. For financial

reporting tasks, recognition of the rule and then application of that rule to justify the accounting treatment is what is required. Application to the specifics of the scenario by referencing the information given is also lacking at times. There was also a lack of clarity in certain areas such as explaining the meaning of an adverse or favourable variance (this often needs to be much more specific) or how a KPI would be measured (this needs to be SMART).

With respect to the core activities for this session, candidate performance was typically best for B (budgeting), E (decision making) and F (working capital). The less competent core activities appeared to be A (costing), C (performance evaluation) and D (financial reporting) but this often depended on the topic area that the task was based on. Many answers were clearly laid out with headings and sub-headings, and timing did not seem to be an issue for most candidates.

To sum up, as has been noted before, the difference between a fail/bare pass and a good pass is often a candidate's ability to apply their technical understanding to the scenario and to incorporate this application into their answers consistently. Candidates should also pay attention to their clarity of explanation and ensure that they have addressed all parts of the sub-task. The same general advice to candidates applies to this session as much as all the previous sessions: answer the sub-task set (not what you wish had been set based on your pre-prepared answer), answer all parts of the sub-task and demonstrate technical understanding within the context of the business and the sub-task, referring as much as possible to the information given to you.

## Variant 1

### Task 1

The first sub-task asked for an explanation of how the lease liability and right-of-use asset for a lease would be both initially and subsequently measured and recorded in the financial statements for the year ending 31 December 2025. This tested core activity D. The quality of answers was mixed. Those candidates with limited technical knowledge of the provisions of IFRS 16 scored at level 1 or sometimes zero. Where candidates had technical knowledge, they were usually able to apply this to explain the main features of the treatment of the lease in the financial statements and score at level 2. However, there were few level 3 answers. The main reasons for this were: failure to recognise that the lease liability would be measured at present value, ignoring the final payment of K\$200,000 (especially in relation to the lease liability), missing the pro-rata for both the interest expense and depreciation charge and/or choosing a depreciation period of 12 or 5 years rather than 8 years.

The second sub-task asked for an explanation of the information shown in Table 1, and which option should be chosen using a risk neutral approach to decision making. This tested core activity E. Many candidates could identify the correct decision on the basis of expected value but often did not justify this, which limited the mark awarded. Some candidates stated that the highest expected value should be chosen, missing the fact that this was cost rather than profit. Other candidates clearly did not understand that a risk neutral approach was based on expected value and scored nil for this part. In terms of explaining the information in Table 1, answers here were usually brief and focused on restatement of the information, rather than explanation. Very few candidates provided any analysis of the information, for example, recognising the best and worst cases, which was expected for a level 3 answer.

The third sub-task asked for an explanation of any limitations of using the information in Table 1 or a risk neutral approach to make the decision. This tested core activity E. Most candidates could identify sensible limitations of the information (such as the estimates of cost and probabilities) and of using an expected value approach. However, scores were often limited to level 2 because answers lacked application to the scenario. For example, many candidates stated correctly that the approach ignored risk but failed to extend the explanation by referencing from the table how a different decision approach would have changed the decision, or to reference the associated probabilities with the different possible outcomes.

### Task 2

The first sub-task asked for an explanation of the figures in the what-if analysis in Table 1, and what they indicated about the impact on the current draft budgeted profit of changes in sales volume, average selling price and fixed costs. This tested core activity B. There were some high scoring level 3 answers here, where candidates provided some analysis of Table 1 with reference to scenarios where profit would be higher or lower than the budgeted profit of K\$850,000 and where losses were possible. There were also a number of low scoring level 1 answers where candidates gave brief responses that mostly repeated the information in the table (for example, stating that at an average selling price of K\$1.20, sales volume of 7,500,000 and fixed cost of K\$3,750,000, profit would be K\$1,500,000). These types of answer provided no added value or insight into how this compared to budgeted profit or gave any indication of possible combinations where losses would be possible. Most candidates though were in the middle ground at level 2. These types of answer

gave some insight but usually only focused on the selling price or sales volume aspect or focused on the possibilities of making losses rather than how the budgeted position would change.

The second sub-task asked for an explanation of any limitations of the what-if analysis in Table 1. This tested core activity B. Most candidates were able to identify at least three sensible limitations. However, like with the limitations for the sub-task in task 1, candidates often failed to score at level 3 because of a lack of reference to the information and application to the scenario to expand the point that they were making. The solution clearly shows how this can be achieved by giving an example for each point made.

The third sub-task asked for an explanation of how a rolling budgets approach would work and the potential benefits and drawbacks of adopting a rolling budgets approach for the production budgets. This tested core activity B. Most candidates scored at level 2 here because they demonstrated reasonable understanding of rolling budgets and gave benefits and drawbacks that were usually quite generic. In many cases, the explanation of a rolling budgets approach lacked depth and clarity, with many candidates focusing on the fact that the budget variables would be updated rather than the fact that it would always be for a fixed period ahead. Again, the benefits and drawbacks often lacked any reference to the scenario. Some candidates also focused on participation in budget setting rather than rolling budgets.

### Task 3

The first sub-task asked for identification of costs and justification of cost drivers for each of the activities in Schedule 1 and an explanation of how these cost drivers could be used to help control the cost of these activities. This tested core activity A. Candidate answers here were either very poor and at level 1, or reasonably good and at the higher end of level 2. In terms of identifying costs, a sizeable number of candidates failed to do this at all (perhaps because they had not read the sub-task properly). Other candidates gave costs such as the cost of the forklifts or the cost of moving pallets but did not articulate what those costs would be (for example, wages of the forklift driver and depreciation of the forklift). As a result, some easier marks were missed. In terms of cost drivers, many candidates gave sensible suggestions but often failed to justify these in respect of how they would drive the cost. The second part of this sub-task on cost control was typically better answered. Even where candidates gave unjustified or vague suggestions for cost drivers, most were able to make sensible comments about the control of costs through reducing the number of pallets, mechanising processes and reducing the number of kilometres travelled.

The second sub-task asked for an explanation of the factors to consider when agreeing initial credit terms with direct customers and the actions the company would need to take to manage the receivables balances of these customers after starting to trade with them. This tested core activity F. Most candidate answers were in the mid-range of level 2. Most candidates focused on the assessment of creditworthiness for factors to consider, but many failed to draw a distinction between the credit limit and the credit period. Some candidates failed to consider the size and nature of the direct customers, despite it being clear in the scenario that these were national chains and independent restaurants and coffee shops. In terms of managing receivable balances, some candidates missed the fact that this would be part of Kia Prinz's role and as such the actions needed to be internally focused. Some candidates wasted time by writing expansively about factoring, which was not relevant in this situation.

## Task 4

The first sub-task asked for an explanation of what each of the variances in Schedule 1 meant and likely reasons for their occurrence. This tested core activity C. As is usually the case, candidates are much better at giving reasons for variances than explaining the meaning of a variance. For example, for the rate variance, many candidates stated that the adverse variance meant that it cost more. This is not explicit enough as costing more could be because more hours were worked or the rate per hour was higher. What is expected is an explicit explanation of the meaning: so for the rate variance, the adverse variance meant that the hourly rate paid to direct labour was higher than standard. In a similar vein, it is not sufficient to say that an adverse idle time variance meant that there was more idle time or that a favourable efficiency variance meant that we were more efficient. What is meant by idle time and efficiency needs to be specified.

The second sub-task asked for suggestions of three KPIs that would be relevant to monitor the performance of an individual delivery driver. For each KPI, candidates were expected to explain how it would be measured, why it would be appropriate and factors to consider when reviewing performance against target. This tested core activity C. Most candidates could give three sensible KPIs that related to delivery drivers. However, scores often failed to get above a lower level 2 because the explanation of measurement was often vague and KPI justification was lacking. Many candidates also seemed to miss that, on this occasion, the sub-task also asked for factors to consider when reviewing performance, perhaps because this was additional to the 'normal' KPI type sub-task. Candidates need to ensure that they address all parts of the sub-task and not just assume that it will be the same as what has gone before.

The third sub-task asked for an explanation, for each of the costs in Table 1, whether they would be relevant or irrelevant for the purposes of determining whether to accept the one-off contract. This tested core activity E. This was well answered, with many higher level 2 and level 3 scores. One common error though was where candidates stated that raw materials would not be relevant because they were in inventory, missing the fact that the raw materials were in continual use and would need to be replaced.

## Variant 2

### Task 1

The first sub-task asked for an explanation of what Chart 1 showed about sales of gluten-free bread products in Keeland and how Halfpenny could determine a trend line and seasonal variations based on all of the data used in Chart 1. This tested core activity B. Many candidates were able to explain the meaning of both sets of data on the chart and to provide an explanation of what this data showed in terms of the increasing level of sales and the impact of new product launches which were detailed in the notes. As a result, many candidates scored at higher level 2 or level 3 for this part of the sub-task. Where candidates scored lower than this, it was usually because they gave vague descriptions of the data in the chart and failed to utilise the information given in the notes to help explain what the data showed. The second part of this sub-task was not as well answered. Most candidates explained how to calculate a four-point moving average instead of explaining how to determine a trend line based on the already calculated four-point averages (either the line of best fit or the use of linear regression). Many candidates were better at explaining how to determine seasonal variations, although this also lacked clarity.

The second sub-task asked for an explanation of the validity of a forecast of sales volume for the new GF@Halfpenny range based on the trend line and seasonal variations. This tested core activity B. Most candidates scored at mid-level 2 or lower here. Many commented on the limitation that the data is historic, and it is hard to know that the pattern will continue into the future. However, many failed to apply this to the scenario. Candidates did explain that the one-off events could have skewed the data. However, most did not consider market share, product mix or the fact that there was no clear seasonal variation. Some answers went far too much into strategic reasons for expanding the range which was not addressing the sub-task and scored no marks.

The third sub-task asked for an explanation of the factors to be considered when choosing to invest funds short term with reference to possible types of investment. This tested core activity F. There were some high scoring level 3 answers where candidates considered risk, return and liquidity within the context of the purchase of the bakery and suggested suitable investments which were justified. Candidates that didn't score as well usually gave very generic answers that did not reference the scenario or even that Halfpenny required the cash to be returned in 2 months. Most candidates listed some suitable investments, but many did not justify why they were suitable. Some candidates drifted off the point here and started talking about whether it was a good idea to invest at all or talked about whether to buy the bakery. Others completely missed the point and talked about sources of borrowing and even leasing.

### Task 2

The first sub-task asked for an explanation of Chart 1 and what it told about fixed costs, budgeted profit, variable cost per unit and break-even position for three alternative production options. This tested core activity E. Many candidates scored at level 2 here because whilst they identified the fixed costs, profits and break-even positions shown in the chart and commented on variable cost per unit, they failed to provide any added value by comparing the options to provide an explanation. For example, candidates could have said that fixed costs were higher for Line A, the fully in-house option, due to the production equipment required to manufacture the products. There were a few level 3 answers where there was added value, including the point that outsourcing had the highest



variable cost by relating this to gradient of the line. Candidates that scored at level 1, provided no comparisons and usually missed at least one or two elements (especially variable cost per unit).

The second sub-task asked for an explanation of the benefits and limitations of the break-even analysis. This tested core activity E. Many candidates stated that the chart was useful as it gave a visual representation of the break-even point and margin of safety for each option. However, very few candidates went beyond this to refer to the chart in their explanation of the benefits. In terms of limitations, most candidates answers were generic rather than applied to the scenario. For example, stating that the chart assumes costs and selling prices per unit were constant. Better answers elaborated as to why, in this circumstance, this may not be the case. As a result, many candidates scored at level 2 here.

The third sub-task asked for an explanation of the other factors to be considered when deciding whether to outsource some or all production of the GF@Halfpenny range. This tested core activity E. This was usually well attempted, with many high level 2 and level 3 scores. Most candidates commented on quality, sustainability, control and expertise with reference to the scenario. Where candidates scored at lower level 2 or level 1, it was because they produced a generic lists of points without relating them back to the company or the scenario. Quite a few answers referred to making employees redundant, which was not relevant here given this was a new range.

### Task 3

The first sub-task asked for an explanation of the nature and cost behaviour of each type of future cost associated with an app. This tested core activity A. Many candidates really seemed to struggle with this, simply listing the costs (already given in the question) with little more than reference to whether the cost was an up-front cost or an ongoing cost. These answers did not address cost nature or behaviour and therefore scored at level 1. Very few candidates could correctly explain why each cost was either direct or indirect, often demonstrating a lack of knowledge as to what these terms mean. In particular, very few candidates commented on the indirect nature of the IT support and servers. Additionally, most candidates could only identify the royalty as a variable cost and did not classify other costs according to their behaviour. Cost behaviour and nature are basic concepts and what should have been relatively easy marks were missed.

The second sub-task asked for an explanation of how to establish a cost per subscriber to the app and the difficulties associated with doing this. This tested core activity A. In terms of how to establish a cost per subscriber, this seemed to present quite a problem for candidates, given that many had just written out a long list of costs. There were a number of strange calculations provided as to how to establish the cost per subscriber, but most candidates had a vague idea and were able to score something here. Some candidates simply stated to divide total costs by the number of subscribers and very few answers referred to the need to determine the share of indirect costs that would be attributed to the app. In terms of the difficulties, this was better answered and most candidates explained that it would be hard to determine the lifetime of the app and the number of subscribers, although some lacked application. Fewer candidates commented on the need to determine future costs and the challenge of apportioning the indirect costs to the app. Most candidate answers ended up at lower to mid-level 2 for this trait.

The third sub-task asked for an explanation of how the property-related expenditure in Table 1 would be recognised and then initially and subsequently measured in the financial statements for the year ending 31 December 2025. This tested core activity D. Many answers lacked detail and

justification. For example, most candidates did not explain the recognition criteria necessary to classify the expenditure as an asset. Some candidates lost marks as, although they correctly stated that every item listed should be capitalised, they did not explain and justify why in relation to the requirements of the accounting standard. Most candidates did explain that the non-land elements would be depreciated but mistakenly used the 50 years and not the 20 years as well as getting the date the depreciation would start wrong. For the marks, candidates should realise that to 'explain', they need to justify the accounting treatment as well as state it.

## Task 4

The first sub-task asked for an explanation of what the variances in Table 1 meant, possible reasons for their occurrence and what the variances indicated about overall sales performance of the GF@Halfpenny White Loaf in the period. This tested core activity C. Most candidates were able to explain the price variance and the reason for it and thus scored well here. However, a very small number of candidates could explain the mix variance. Many candidates seemed thrown by the weighted average method of calculation. For example, most candidates did not understand that the favourable variance for retailers meant that, because retailers are less profitable, this shows that Halfpenny sold proportionately less through this channel. Answers on the quantity variance were better and well applied, although many candidates failed to comment about overall performance.

The second sub-task asked for suggestions of three KPIs that could be used to monitor the usage of the subscription app, explaining how each KPI would be measured and why it would be appropriate. This tested core activity C. Typically, candidates struggle to gain full marks on such tasks because they fail to explain how to measure the KPI they have suggested. In some cases, candidates repeated essentially the same KPI. It is important to justify why it is important to measure. Sometimes candidates merely explained in more detail the KPI itself as opposed to explaining why it is important to the business.

The third sub-task asked for an explanation of how the issues identified in Table 2 would affect the financial statements for the year ended 31 December 2025. This tested core activity D. Candidates did fairly well on this task but as with the previous financial reporting task, many did not fully justify the treatment and hence did not properly 'explain' it. It was clear some candidates expected there to be one adjusting event and one non-adjusting and thus missed marks.

## Variant 3

### Task 1

The first sub-task asked for an explanation, using the information in Table 1, of the differing impacts on the budgeted contribution and profit of the 10% independent adverse changes to selling price, cost of flour and sales volume. This tested core activity B. This was not well answered, with only a few candidates earning a higher level 2 mark. Many candidates simply repeated the information given to them without explaining the impact on contribution and profits, for which few marks could be awarded. Some candidates produced answers that were not relevant to the task. For example, some candidates explained what actions could be taken to help reduce the impact of the adverse changes, and others interpreted this as an exercise in marginal costing and explained the principles of marginal costing and its use in break-even analysis. The data provided to candidates should have been relatively easy for candidates to explain. For example, any reduction in selling price would affect revenue, contribution and profit by the same absolute amount in cash terms, but this would have a far more significant impact on both contribution and profit in percentage terms.

The second sub-task asked for an explanation of the situation represented by each of the five points, A to E, shown on Graph 1 and the factors that needed to be considered in relation to output, resources and profits at those points. This tested core activity E. Although linear programming graphs have been examined before, this sub-task was a more novel way of testing candidates' understanding. As a result, there was a wide range of candidate performance. There were some high scoring level 3 answers where candidates clearly understood what was represented at each point, linking this to the scenario of being able to relax one of the constraints whilst also having to meet the Gourmetopia contract in full and meeting the Rustic demand. Such answers recognised the resource limitations of each point on output and made some plausible suggestions such as increasing shaping hours to achieve point E to meet the contract and to negotiate with Rustic customers a lower supply for the next 6 months. Lower scoring candidates (often scoring mid-level 2) explained what the five points represented without considering the impact of each point on the potential contract and current Rustic bread demands. Some candidates answered the task that has been asked before and described the feasible region and how to determine the optimal solution and often ended up at level 1.

### Task 2

The first sub-task asked for an explanation of how planning and control of flour costs within the budgeting process could be improved by using big data and artificial intelligence. This tested core activity B. This was reasonably well attempted by most candidates who demonstrated an understanding of the meaning of big data and artificial intelligence. However, it was not always clear in their explanation what points were being made in relation to planning and those in relation to control. The explanation was sometimes rolled into one large paragraph, or subheadings used for big data and artificial intelligence without clearly saying whether points made related to planning or control. The use for planning was usually better explained than in the use for control purposes. Lower scoring candidates usually explained big data and artificial intelligence in general terms, rather than linking to flour costs. Although these kinds of answers earned technical understanding marks, they often failed to earn application marks and therefore scored at level 1 or low level 2.

The second sub-task asked for suggestions of three KPIs for monitoring production cost and volumes, explaining how each of these would be calculated and why they would be appropriate.

This tested core activity C. There were many disappointing answers here. A number of candidates proposed variances as KPIs, for example, direct labour variances and raw material purchase price variances. Such suggestions scored no marks. As is often the case, there was also a lack of clarity in some answers as to how the KPIs proposed would be measured or calculated. For example, a fairly common KPI proposed for volumes was to compare the current month's output against the previous month's output. It wasn't clear how this would help management judge performance since a higher output in the current month could just reflect a higher level of sales demand. It would have been much better, in this example, to propose a KPI comparing actual output against planned output in the period.

The third sub-task asked for an explanation, using Table 1, of what moving to a more aggressive working capital policy would mean for the company. This tested core activity F. There were not many higher scoring level 2 or level 3 answers, although candidates usually demonstrated an understanding of what a more aggressive working capital policy would mean. A minority of candidates went down the wrong route of discussing short-term and long-term sources of finance. This was the wrong focus, which should have been on working capital issues. Many candidate answers also only went part way in meeting the sub-task. These answers often just stated what Halfpenny could do, for example, use less silos to reduce inventory, reduce receivables, or increase payables, without going on to explain how these actions could be managed. Candidates needed to also comment on the potential risks of their proposed actions on running out of raw material inventory or of antagonising customers and suppliers, and the implications this could mean for the business.

### Task 3

The first sub-task asked for an explanation of what the variances in Schedule 1 meant, possible reasons for their occurrence and what they indicated about production performance in the Baking Department. This tested core activity C. The meaning of the expenditure variance was usually made clear, but some candidates still seem to think that actual costs were higher because production volume was higher, forgetting that this variance is about fixed costs. A common mistake, even by those candidates who correctly said that the variance was the difference between actual and budgeted costs, was to try and explain this variance on the recruitment of more direct labour and higher energy costs. These costs were not relevant to the fixed overhead expenditure variance. For the capacity variance, there was usually a lack of understanding shown in the meaning of this variance. Candidates often said it was due to a higher level of production units or more direct labour recruited. These were valid reasons for a favourable capacity variance, but the explanation of the meaning of this variance should have been linked to machine hours. The efficiency variance was usually reasonably well explained, but many candidates used direct labour hours rather than machine hours in their explanation. There was also a lack of clarity in some answers with candidates comparing actual hours (direct labour or machine) against budgeted hours. It was not clear then whether candidates were referring to the original budget or a standard allowance for the actual output. As with other variance sub-tasks, candidates were typically better at giving the reasons for the variances rather than explaining the meaning.

The second sub-task asked for an explanation of how the CGMA cost transformation model in Graphic 1 could be applied to the business as a framework to maintain Halfpenny's profitability. This tested core activity A. This was well answered by the majority of candidates who showed good technical knowledge of this model and could link their explanations of each of the six areas to the implications for costs and profitability. As is often the case with lower scoring candidates, their

answers tended to be too brief, often with just one-line sentences or, having explained some of the six areas, did not then go to comment on how they could be applied in Halfpenny's business. A fairly common answer amongst these candidates was to explain the area of "create a cost-conscious culture" only in terms of the benefits of bottom-up budgeting by departmental managers, rather than creating a cost-conscious culture.

## Task 4

This first sub-task asked for an explanation, based on the information in Schedule 1, of how Oven B and the new oven would be recorded in the financial statements for the year ended 31 December 2025. This tested core activity D. This was generally well answered by many candidates who showed sound technical knowledge. The need to impair Oven B was usually recognised, as was the rule of valuing the asset at the lower of its carrying amount and recoverable amount of K\$25,000. However, not many candidates went on to say that the asset would be removed from property, plant and equipment on 31 December 2025, with no loss on disposal. Accounting for the new oven was also generally well explained. The main weaknesses were a failure to justify both the treatment as an item of property, plant and equipment and the capitalisation amount. A minority of candidates thought the testing cost of K\$5,000 should be expensed.

The second sub-task asked for an explanation, based on the information provided, of how the issues in Schedule 2 would affect the financial statements for the year ended 31 December 2025. This tested core activity D. This was less well answered. Whilst most candidates showed a general understanding of the principles of adjusting and non-adjusting events, many could not always apply these principles to the receivable issue. A minority of candidates stated that the receivable should be written off in 2026 because Gourmetopia only went into liquidation on 4 January 2026, demonstrating a lack of understanding. The inventory valuation issue was usually better answered, with most candidates recognising that the inventory should be valued at the lower of cost and NRV.

The third sub-task asked for an explanation of how the information in Schedule 3 could be used to help decide which level of additional production to choose using maximax, maximin and minimax regret criteria, identifying any conflicts that could arise. This tested core activity E. This has been tested many times before and most candidates scored at level 3 because they explained the three decision criteria and usually could correctly identify the correct level of production in each case.

## Variant 4

### Task 1

The first sub-task asked for an explanation of the issues to consider when granting credit to Organica, including any additional information required. It also asked for a discussion of the usefulness of the report and letter that Organica sent to support its application. This tested core activity F. Most candidates scored at level 2, making sensible comments about the report and letter provided, and what concerns these gave rise to in terms of the recent credit downgrade and low credit terms. This demonstrated good application to the information given. However, candidates failed to reach a level 3 score because they either did not specifically mention the issues to be considered (the risk of late or non-payment) or did not consider additional information that would be required (such as financial statements). Additionally, many candidates failed to comment on the usefulness of the information.

The second sub-task asked for an explanation of how to identify relevant costs and why each of the cost items shown in Table 1 was either relevant or irrelevant for the decision about subcontracting the promotional campaign. This tested core activity E. There was a small minority of candidates that seemed to consider that this was about costing in a more general sense rather than about relevant costs and so scored nil. For the majority of candidates though, this was reasonably well answered, although scores were often limited to level 2 because of poor or non-existent explanations of why the cost was either relevant or irrelevant. For this type of task, we are looking for a justification of why the cost is relevant or irrelevant, not just a simple statement. Some candidates did make technical mistakes and these included: stating that the future fixed overheads were relevant because they were in the future, even though these were fixed costs and the scenario being clear that there were no incremental costs; failing to identify that the committed food photographer cost was 60% of K\$10,000 and getting confused about the potential opportunity cost.

The third sub-task asked for an explanation of two non-financial factors to consider before making this decision. This tested core activity E. This was well answered, with most candidates either scoring at high level 2 or at level 3 because they gave two sensible points that were related to the scenario. Where candidates didn't score well, it was usually because the answer was brief (a statement of a factor rather than an explanation) or failed to link it to the scenario.

### Task 2

The first sub-task asked for an explanation of throughput accounting and the ratios prepared to help prioritise production until the problem with the drive mechanism was rectified. This tested core activity A. This was typically not well answered. Many candidates were able to rank the types of bread and commented on the order of production, which demonstrated use of the information provided and so scored some marks. However, most candidates failed to really answer the sub-task which was to explain throughput accounting and the ratios provided. Explanations of throughput accounting were weak, with few candidates commenting on the basic point that it treats all costs, other than raw material costs as fixed costs. Many candidates failed to comment on the ratios at all, other than to refer to the ranking. Some candidates did state that the throughput accounting ratio was calculated as the return divided by the cost. However, only a few candidates then went on to explain the meaning of the ratio and the relevance of a score above 1.

The second sub-task asked for an explanation of the suitability of throughput accounting for production planning at Halfpenny. This tested core activity A. Most candidates reiterated the



general advantages of prioritisation using throughput accounting. Few candidates recognised that throughput accounting has a very short-term focus and that in the longer term the focus should be on removing bottlenecks. Reference to the scenario was also limited, with few candidates picking up the point that due to the change in labour contracts, this was now a fixed cost. As a result of all of this, most candidates scored at level 1.

The third sub-task asked for an explanation of the potential benefits for Halfpenny of using big data and AI when setting sales budgets. This tested core activity B. This was well answered by many candidates, who seemed well prepared and understood the benefits of both big data and AI for sales forecasting. As a result, many candidates scored at higher level 2 or level 3. Where candidates didn't score so well, it was either because they failed to focus on sales budgets and/or gave a very generic answer that made little reference to Halfpenny and the bread market.

### Task 3

The first sub-task asked for an explanation of each of the variances in Schedule 1, the possible reasons for their occurrence and what they indicated about production performance in the Mixing & Kneading Department. This tested core activity C. Most candidates could accurately explain the meaning of the adverse expenditure variance and provide reasons for the variance drawn from the scenario. Many candidates could also accurately explain the meaning of the adverse efficiency variance and provide reasons. Fewer candidates were able to clearly explain the meaning of the volume and capacity variances. Answers were often confused and the reasons given not appropriate. Very few candidates specifically commented on what the variances indicated about production performance, which was disappointing and resulted in many scores staying at level 2 rather than level 3.

The second sub-task asked for an explanation of the difference between feed back and feed forward control and how feed forward control reports could help control production at Halfpenny. This tested core activity B. Most candidates were able to explain that feed back is reactive and feed forward proactive but often failed to consider the control aspect. Surprisingly few candidates defined each type of control (feed back control being the comparison of actual results to budget and feed forward control being the comparison of forecast results to budget). Where candidates did attempt to define each type of control, feed forward control was often defined as comparing actual results to forecast, which was inaccurate. Very few candidates provided good answers for the second part of this sub-task on how feed forward control reports could help control production. Most candidates gave bland statements about being proactive but made no reference to the scenario. As a result of all of this, many candidates failed to score above level 1.

### Task 4

The first sub-task asked for an explanation of how the damage to the assets shown in Table 1 should be reflected in the financial statements for the year ending 31 December 2025. This tested core activity D. Most candidates were able to identify that the freezer unit was impaired, given it was not insured, and that it should be written down to a recyclable value of K\$4,000. Few candidates fully explained the process of determining the impairment by comparing carrying amount to recoverable amount and that recoverable was the higher of value in use and net selling price. For the freezer room, answers were mostly poor, as candidates did not recognise that because the insurance company would be paying for the repairs, there ultimately was no impairment. Answers on inventory were better, but again few candidates demonstrated



understanding of the key rule that inventory is valued at the lower of cost and net realisable value. Candidates are reminded that for financial reporting tasks it is a useful approach to firstly state the rules and then secondly apply those rules to the information given to justify the accounting treatment.

The second sub-task asked for an explanation of how, with reference to IAS 16: Property, plant and equipment, each of the costs of the new freezing unit in Schedule 1 should be reflected in the financial statements for the year ending 31 December 2025. This tested core activity D. This was reasonably well answered, with most candidates scoring at least at level 2. Again though, many candidates failed to state the rules or to consider why it should be recognised as an asset.

The third sub-task asked for suggestions of four performance measures and an explanation of how each of them would be calculated and why they would be appropriate for measuring the performance of individual sales staff. This tested core activity C. This was not well answered for the most part. Many candidates gave KPIs which related to the team as a whole or to marketing, rather than to individual sales staff. Some candidates even gave KPIs relevant to production. Even where suitable KPIs were given, these were often vaguely explained, which limited justification.

## Variant 5

### Task 1

The first sub-task asked for an explanation of what each of the variances in Table 1 meant and possible reasons for their occurrence. This tested core activity C. Most candidates could explain the meaning of the fixed overhead expenditure variance, although some candidates did comment that actual fixed overhead costs were higher because production volume was higher, forgetting that this variance is about fixed costs. However, explanation of the meaning of the variable production overhead variance was usually less clear. A common answer was to say that the variance was adverse because costs were higher due to production being higher than budget. This was not clear enough; candidates needed to be more explicit that the original budget for variable overheads should be flexed for actual machine hours. There was also confusion in many candidates' answers about whether the significant increase in electricity costs was a variable or fixed overhead cost and often attributed this incorrectly as a reason for the fixed overhead efficiency adverse variance. Few candidates could explain the meaning of the fixed overhead capacity variance with accuracy, although explanations of the efficiency variance were better. Most candidates therefore scored at level 2 here.

The second sub-task asked for an explanation of three areas of the CGMA cost transformation model, how these already applied to the business and how they could be applied in the future. This tested core activity A. This was well answered by the majority of candidates who showed good technical knowledge of these areas of the model in the context of the business, especially sustainability. As a result, many candidates scored at high level 2 or level 3. Where candidates didn't score so well, it was often because they failed to apply their knowledge to either what the company was already doing or what could be done in the future.

### Task 2

The first sub-task asked for an explanation of how the wind turbine would be recognised and initially measured in the financial statements for the year ending 31 December 2025. It also asked for an explanation of the impact of the wind turbine on the reported profit for the year ending 31 December 2025. This tested core activity D. A small number of candidates demonstrated sound knowledge of IAS16 and applied this knowledge to the information given to score at level 3. Where this was not the case, this was often due to a failure to justify the treatment by either not commenting on the recognition criteria for non-current assets or why some of the costs were directly attributable. Some candidates commented that the safety inspection cost should be expensed rather than capitalised, and some candidates added the cost of the blades to the total price of the wind turbine, although it was already included. For the profit impact, there were two fairly common errors. These were depreciating all costs over 15 years, instead of 5 years for the three blades, and saying that there should be 2 months depreciation in 2025 based on the completion date of 31 October instead of identifying the date when the wind turbine was available for use. Overall, the majority of candidates scored at level 2.

The second sub-task asked for an explanation of how the old ovens would be classified and measured in the financial statements for the year ending 31 December 2025, assuming the sale occurred in 2026. This tested core activity D. Candidates who made a good attempt at the first sub-task, usually made a good attempt at this sub-task. Many candidates demonstrated sound technical understanding of IFRS 5 and were able to apply this in their answers. The need to reclassify the old

ovens as an asset held for sale was usually recognised, although some candidates lost marks because they failed to fully justify this in the context of the recognition criteria. The rule of valuing the asset at the lower of its carrying amount and fair value less selling costs was also recognised by most candidates, although many missed that depreciation would not stop until 1 October, which was the date that the asset was reclassified. Some candidates did not know how to treat some of the costs, for example, saying that the safety testing cost of K\$1,500 should be expensed in 2025 or that the selling costs of K\$3,400 should be deducted from the carrying amount instead of the fair value.

The third sub-task asked for suggestions of three KPIs that would be appropriate for monitoring the sustainability of the production process and to explain how each would be measured and why they would be appropriate. This tested core activity C. There were many disappointing answers and many candidates suggested variances linked to either machine efficiency or machine utilisation, rather than KPIs. A number of candidates suggested monitoring of carbon emissions but could not explain how this would be measured. In general, many candidate answers lacked clarity when explaining measurement and appropriateness. For example, some candidates' suggested comparing energy usage in the current month against the previous month or the same month last year. This failed to explain the link to sustainability, since changes in energy usage would more likely be linked to sales demand and it wasn't clear therefore how this would help management judge sustainable performance.

### Task 3

The first sub-task asked for an explanation of how a ZBB approach could be applied to create a budget for production employee training costs, including the creation of decision packages, with reference to the information provided in a schedule. This tested core activity B. Answers were mixed. There were a significant number of candidates that scored at level 1 because, whilst they demonstrated an understanding that the ZBB process starts from scratch, they often just listed the basic steps of establishing objectives through to ranking and budget allocation without providing explanation or reference to employee training. Where candidates did attempt to link it to employee training, answers often lacked detail or clarity and so tended to score at lower level 2. Whilst many candidates did mention decision packages, only some of these went on to explain how mutually exclusive or incremental decision packages could be developed for production employee training costs.

The second sub-task asked for an explanation of the benefits to the business of using a ZBB approach for budgeting support activity costs and any challenges that might be faced if this approach was applied in practice. This tested core activity B. Many candidates did well here, scoring at higher level 2 or level 3 by providing two benefits and two challenges that were applied to the scenario. Candidates that scored at lower level 2 or level 1, typically produced a list of points, rather than providing an explanation in the context of the scenario.

The third sub-task asked for an explanation of whether, in the event of each of the three possible market reactions, it would have been worthwhile paying K\$60,000 for the perfect information, assuming that the SMT made the decision about which promotional campaign to undertake using a risk neutral approach to the decision. This tested core activity E. This was by far the worst attempted sub-task for this variant. The majority of candidates showed a clear lack of technical understanding in relation to the use of perfect information but scored at level 1 by correctly identifying that campaign 1 would be the risk neutral decision. There were a few excellent answers

here where candidates recognised that what was expected was a comparison, for each state of the market, of the result for campaign 1 against the best result for that state of the market and therefore whether the K\$60,000 paid was worth it.

## Task 4

The first sub-task asked for an explanation of Graph 1, how to use the graph to determine the optimal production plan and what that optimal production plan would be. It also asked for an explanation of the factors that should be considered before proceeding with this production plan. This tested core activity E. Most candidates gave a good explanation of the graph and what each of the four lines represented with reference to the information in the graph. However, some candidates then failed to explain how to use the graph to determine the optimal production plan, which limited scores to lower level 2 for this trait. What was expected was an explanation of the feasible region and how to move the iso-contribution line to arrive at the intersection point of A and B. Some candidates simply stated that this was the optimum, which, although correct, earned no credit because it was not justified. Many candidates also failed to provide factors that should be considered before proceeding with the production plan. It was expected that candidates would discuss how the constraints could be relaxed, but not many did this.

The second sub-task asked for an explanation of the EOQ model and the information needed to determine the economic order quantity for each type of grain and seed that is purchased. This tested core activity F. Most candidate answers here were disappointing because despite demonstrating some basic understanding, the explanation needed to be fuller and more explicit. Many answers were very vague and so scores tended to be lower level 2 or level 1. Most candidates knew that the EOQ model had something to do with ordering and holding costs but were often very unclear what the model was trying to achieve or the information that was needed. Some candidates wanted to compare JIT purchasing with the use of the EOQ model, but this was not required.

The third sub-task asked for an explanation of the problems associated with the assumptions underpinning the model and how to overcome these problems by adapting the model. This tested core activity F. Despite an often lack of clarity in explaining the EOQ model in the previous sub-task, many candidates made a reasonable attempt at this sub-task. This was perhaps helped by the scenario providing issues with the availability of grains and seeds and with the loss of bulk purchase discounts. Many candidates used these issues in their answers, and this was appropriate. Having commented on the problems however, not many candidates went on to explain how the problems they had identified could be overcome. As a result, many candidates scored at level 2 here.

## Variant 6

### Task 1

The first sub-task asked for an explanation of the benefits of using beyond budgeting, particularly in view of the varying demand volumes and low profit margins seen in contract, increasing the need to be more responsive. This tested core activity B. Most candidates demonstrated understanding of rolling budgets and were able to explain the benefits of this in the context that the company was now in. However, candidate answers often stopped at this and did not go on to consider other features of beyond budgeting such as the benefits of setting performance targets, increased participation or looking ahead in terms of scenario planning. Disappointingly, there were a considerable number of answers where the candidate had written a lot, but much of this was repetition and there was little focus on beyond budgeting. These types of answers tended to score at level 1.

The second sub-task asked for an explanation of the types of costs that Halfpenny would incur when developing the bread-ordering app. This tested core activity A. Some candidates provided an excellent, level 3 answer where they used the scenario to comment on the various types of cost that would be required, including platform integration and training costs. However, many candidates only commented on the cost of the developers themselves, which often limited the score to lower level 2. Some candidates also commented on future ongoing costs for this sub-task and then ended up repeating themselves for the next sub-task.

The third sub-task asked for an explanation of the future issues and ongoing costs of the bread-ordering app that needed to be considered. This tested core activity A. Many candidates did better here and were able to explain a more comprehensive number of future issues and ongoing costs. Most candidates picked up on the main types of cost (such as maintenance, administration, data security and training) and commented on these costs in the context of Halfpenny and this app. As a result, many candidates scored at higher level 2 here.

### Task 2

The first sub-task asked for an explanation, using Table 1, of how the costs of the oven would be recorded in the financial statements for the year ending 31 December 2025. This tested core activity D. Many candidates did reasonably well here, scoring at level 2 for the most part. The reason why there were not more level 3 scores was because many candidates failed to comment on the recognition criteria for property, plant and equipment and started their answer with the costs which should be capitalised. It was unusual to see reference to future economic benefit, reliable measurement, and the asset having to be used in the business for more than 12 months. Most candidates could identify the costs to capitalise, however some failed to justify why this was the case for each element of cost, which then often limited scores to level 1 or lower level 2. Future candidates should be aware that justification of accounting treatment is required for these types of sub-task, and that this should be for each element of cost in this instance. Some candidates misclassified the annual safety certificate as part of the asset cost.

The second sub-task asked for an explanation, using Table 2, of how the lease liability and right-of-use asset for the conveyor belt lease should be initially measured in the financial statements. This tested core activity D. Some candidates did well here, scoring at higher level 2 and sometimes level 3 by demonstrating good technical understanding and making reference to the information in the table. For other candidates common issues were: confusion about present values, omission of the

removal payment from the right-of-use asset and justification of the omission of the option cost in the lease liability. Many candidates wasted time by explaining principles of depreciation and how the lease liability would be written off over time. This is part of explaining subsequent measurement, which was not necessary.

The third sub-task asked for an explanation, using the information in Schedule 1, of the differences between invoice discounting, factoring and an overdraft. This tested core activity F. Most candidates were able to comment about all three of these but often failed to focus on the differences between them. Some candidates thought that invoice discounting was the same as factoring and quite a few candidates also confused with and without recourse. Many candidates also didn't comment on the reason for the administration costs being so different. As a result, scores tended to be mid-level 2 here.

### Task 3

The first sub-task asked for suggestions of two KPIs to monitor waste and two KPIs to monitor the effectiveness of the new app, with an explanation of how each would be measured and why it would be appropriate. This tested core activity C. Candidate answers were mixed. Lower scoring candidates typically did not comment on how the KPI would be measured, or if they did, this was very vague and not SMART. Such candidates also often failed to justify why the KPI was appropriate in a clear and focused way. Where candidates did attempt to explain how to measure the KPI, this was sometimes at odds with the measure provided. The important thing to note is that the KPI suggested should be follow the SMART principles and although many candidates stated these features, they then did not adhere to them when coming up with KPIs.

The second sub-task asked for an explanation of how big data and big data analytics might be used to support planning and control in the company's sales budgets. This tested core activity B. Many candidates were able to demonstrate understanding of how big data and big data analytics could be used for sales budgeting and did attempt to apply this to the scenario. This type of candidate scored at higher level 2 or above. However, some candidates clearly didn't have any idea about big data or big data analytics and therefore struggled to score anything. Some candidate answers were quite repetitive and focused on planning rather than control, which tended to limit the score for the second trait. For this type of sub-task, application to the scenario is key, and this did not appear to be an issue for the better prepared candidates.

### Task 4

The first sub-task asked for an explanation of what each of the variances in Table 1 meant, possible reasons for their occurrence and what they indicated about sales performance. It also asked for an explanation of how suitable they were for reviewing sales of loaves to Fresh Picks. This tested core activity C. As for previous sessions, some candidates stated that the variance was favourable or adverse but did not say what this actually meant. These candidates often stated that adverse was bad and favourable was good. For both price and volume variances, it was important for candidates to comment on all elements of the variance because they had different meanings. Sometimes candidates only commented on the total variance and this meant that the reasons they suggested were confusing. In a similar way, some candidates made general comments about reasons but did not say which variants they related to. However, many candidates did explain the meaning and reasons for the variances well. Disappointingly, only a few candidates commented on the suitability of the variances, which tended to limit scores to level 2.

The second sub-task asked for an explanation, using the information in Table 2, why the Production Director chose the medium output level for Organic Rustic rolls and the impact of that decision. This test core activity E. Most candidates were able to identify that this was in fact a minimax regret decision but struggled to explain why the medium level was chosen. Many confused minimax regret with maximin. A small number of candidates did well when explaining the impact of the decision, although many ignored this part.

The third sub-task asked for an explanation of why each of the items in Table 3 was relevant or irrelevant to the decision about accepting the contract from the Organic Food Festival and if any additional information was required. This tested core activity E. Most candidates did well here and scored at level 3. Where this was not the case, it was usually because candidates had failed to justify why a cost was either relevant or irrelevant. It is not enough to define relevant costs at the start of the answer and then just list the costs and state whether they are relevant or irrelevant. Few candidates picked up on the issue in relation to the administration costs in respect of further information.



## Tips for future candidates

There are several key points to take into account when preparing for future Operational level case study examinations. These points are the same as in previous reports and are:

- Key to achieving a score at level 2 and above is to ensure that:
  - You have the technical knowledge and understanding of all of topics included in each of the core activities. It is not sufficient to rely on the fact that you remember it from the OTQ exams or from your FLP studies because the chances are you won't. You need to revise technical material: if you don't have the knowledge, you can't score well.
  - You are able to apply your technical knowledge and understanding within the case study context. Simply reproducing rote-learned answers or pure knowledge of a topic area will score very few, if any, marks. Similarly, taking a non-targeted approach to an issue and commenting on everything that you know about it from a theoretical point of view will score few marks.
  - You are able to explain with clarity and comprehensively, rather than making unsupported statements. Writing comments such as, "this improves decision making", "this graph is essential" or "planning is enhanced" is not enough to gain any marks. Candidates must explain "how" and "why" this is the case. Explanations can quite often be improved by adding "because of ...." at the end of a sentence. Explanations should also utilise the information given to you within the case study itself, especially financial information. For example, reasons for variances are often given to you in the unseen information, the skill is to pick this out and use it.
- To help you achieve this, you need to:
  - Study the pre-seen material in depth. Ensure that you are very familiar with the business, especially the financial information, before the exam as this will help you with applying your knowledge and will save you time. Similarly, an awareness of the industry that the business is in will help you to think of the wider issues that might impact on decisions that you could be asked to comment on.
  - Practise, practise, practise past OCS exam tasks. Practising past tasks and then checking against the published answers will help you to understand what the examiner is looking for.
- On the day:
  - It is important to take time to plan your answer so that you are able to apply your knowledge to the specifics of the case. I suggest that for certain tasks you plan your answers in the answer screen itself. For example, if you are asked for the potential benefits and problems of activity based costing, I suggest that you first note down headings for benefits and problems. Under each heading, list your benefits and problems; these will become your sub-headings. Then you can write a short paragraph under each sub-heading. This will allow you time to think about all of the points that you want to make and will help to give your answer a clear format. Ultimately, it should save you time.
  - Please take care over how your answer looks. Some answers are very difficult to read because of poor spelling and grammar. Whilst this examination is not a test of English, it is important that answers are presented well so that markers can see that you have demonstrated clear understanding of the issues.