2225 – 5011M

Diploma Programme
Programme du diplôme
Programa del Diploma

Markscheme

May 2025

Business management

Standard level

Paper 2

14 pages

The markbands on page 3 should be used where indicated in the markscheme.

Marks	Level descriptor
0	The work does not reach a standard described by the descriptor.
1–2	• Little understanding of the demands of the question. • Little use of business management tools and theories; any tools and theories that are used are irrelevant or used inaccurately. • Little or no reference to the stimulus material. • No arguments are made.
3–4	• Some understanding of the demands of the question. • Some use of business management tools and theories, but these are mostly lacking in accuracy and relevance. • Superficial use of information from the stimulus material, often not going beyond the name of the person(s) or name of the organization. • Any arguments made are mostly unsubstantiated.
5–6	• The response indicates an understanding of the demands of the question, but these demands are only partially addressed. • Some relevant and accurate use of business management tools and theories. • Some relevant use of information from the stimulus material that goes beyond the name of the person(s) or name of the organization but does not effectively support the argument. • Arguments are substantiated but are mostly one-sided.
7–8	• Mostly addresses the demands of the question. • Mostly relevant and accurate use of business management tools and theories. • Information from the stimulus material is generally used to support the argument, although there is some lack of clarity or relevance in some places. • Arguments are substantiated and have some balance.
9–10	• Clear focus on addressing the demands of the question. • Relevant and accurate use of business management tools and theories. • Relevant information from the stimulus material is integrated effectively to support the argument. • Arguments are substantiated and balanced, with an explanation of the limitations of the case study or stimulus material.

Section A

1. (a) State **two** features of a market-orientated business. ***[2]***

The business:
- **focuses** on the **products** that **can sell** rather than introducing new products;
- focuses on **developing products** that **consumers want.** Product/service development is influenced by targeting customer needs;
- **relies** heavily **on market research** to make decisions on the product, price etc.
- outward looking approach that focuses on the market needs;
- is client orientated/likely high customer satisfaction since their needs are integrated into the product/service.

Accept any other relevant feature.

***N.B.** no description or application to the stimulus is required.*

*Award **[1]** for each relevant feature stated, up to a maximum of **[2]**.*

(b) Using **Table 1**:

(i) prepare a statement of financial position (balance sheet) for *Caramelo* as at 31 December 2024; ***[4]***

Statement of financial position (balance sheet) as at 31 December 2024
(all figures in $000)

Non-current assets		
Property plant and equipment	2000	
Accumulated depreciation	(500)	
Non-current assets		**1500**
Current assets		
Cash	100	
Debtors	100	
Stock	100	
Current assets		300
Total assets		**1800**
Current liabilities		
Trade Creditors	250	
Current liabilities		250
Non- current liabilities		
Borrowings—long-term	100	
Non- current liabilities		100
Total liabilities		**350**
Net assets		**1450**
Equity		
Share capital	1000	
Retained earnings/profit	450	
Total equity		**1450**

***N.B**. accept retained earnings or retained profit.*

N.B.** if the candidate does not follow the IB prescribed format award a maximum of **[3].

*Award **[1]** if the candidate conveys some idea of what a statement of financial position (balance sheet) is.*

*Award **[2]** if the candidate constructs a largely recognizable statement of financial position (balance sheet), but it does not balance, or it has two major problems of classification.*

*Award **[3]** if the candidate has produced an accurate statement of financial position (balance sheet) that balances correctly but is missing one entry, such as non-current assets, current assets, total assets, current liabilities, or total liabilities.*

*Award **[4]** if the candidate constructs an accurate statement of financial position (balance sheet) (that balances) according to the IB prescribed format and the statement of financial position (balance sheet) is dated and has a heading.*

(ii) calculate *Caramelo*'s current ratio (*show all your working*). ***[2]***

Current ratio = current assets / current liabilities= \$300/\$250= **1.2**

*Award **[1]** for the correct working and **[1]** for the correct answer.*

(c) Explain **one** option *Caramelo* could use to finance the new factory. ***[2]***

- A **long-term bank loan**, though it **will not be enough** to finance the new factory that has an **estimated cost of \$600 000** (because the bank loan is \$550 000). **Therefore**, *Caramelo* would have to **contract its cash position by \$50 000**, thus, further weakening its liquidity.
- By **issuing shares** *Caramelo* could **raise as much as** they **need** (as it is a publicly held company), **though** this option would **dilute** current **ownership**.
- *Caramelo* could consider a **combination of both** long-term debt and equity.
- Any other relevant source including retained profits, long-term debt securities, debentures, leases, business angels, and the sale of unused assets should be awarded.

***N.B.** Do not accept a short-term source of finance such as a bank overdraft.*

*Award **[1]** if the candidate identifies one relevant option.*

*Award **[2]** if the response contains some nuance or detail with application to Caramelo.*

2. (a) State **two** examples of fixed costs. ***[2]***

- Advertising
- Salary
- Insurance
- Rent/lease payments

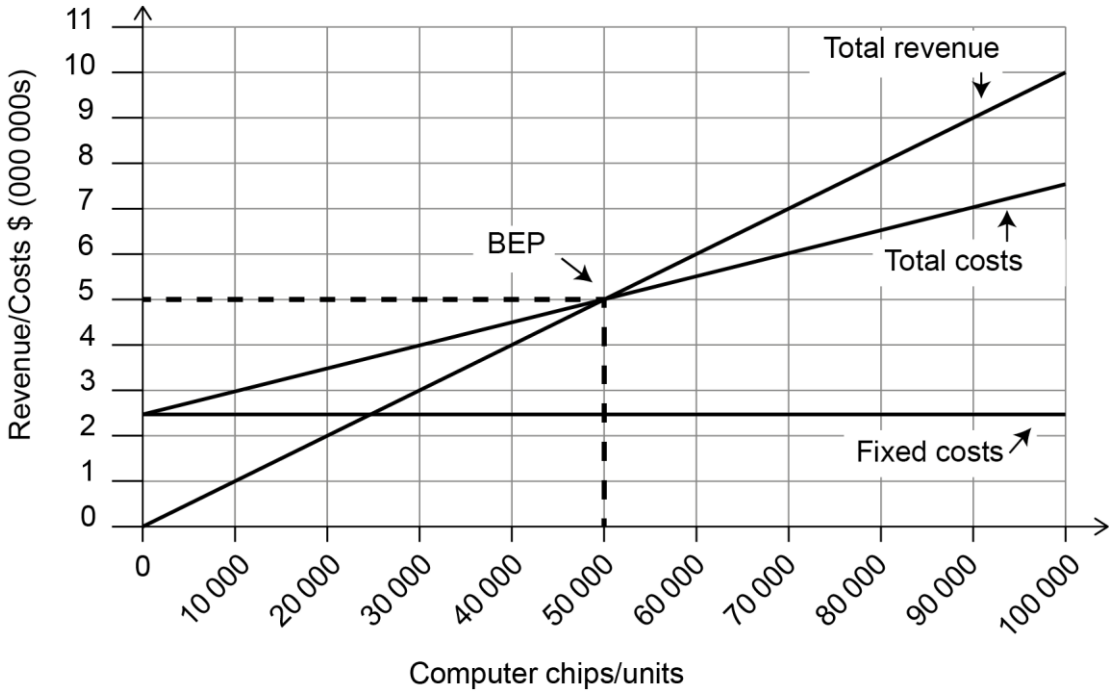
Accept any other relevant fixed cost.

N.B. *no description is required.*
Do not award land building, equipment, machinery. These are examples of fixed assets.

*Award **[1]** for each relevant fixed cost stated, up to a maximum of **[2]**.*

(b) Using **Table 2**:

(ii) construct a fully labelled break-even chart for *FT*, to scale, for the new computer chip; ***[4]***



Break-even point = fixed costs / contribution per unit

BEP is = $\frac{\$2\ 500\ 000}{\text{(contribution)}}$

Contribution of the new computer chip is direct cost per chip – price per chip $100 − $50 = $50

Break Even Point = $\frac{\$2\ 500\ 000}{\$50}$ = **50 000 computer chips**

Award marks as follows:
[1] *for both appropriately labelled axes – y-axis must include both costs and revenue. The x-axis can be any suggestion of quantity: units- new computer chips.*
[1] *for accurately drawn and labelled total cost line.*
[1] *for accurately drawn and labelled total revenue line.*

[1] *for indication of break-even point. OFR applies.*
Award a maximum of ***[2]*** *if the chart is not neat, not drawn with a straight edge, or is not to scale.*
If a candidate produces a table rather than a chart, award ***[0]****.*

(ii) calculate the margin of safety (*show all your working*). ***[2]***

Margin of safety = forecasted sales – BEP
Margin of safety = 70 000 computer chips − BEP (50 000) computer chips = **20 000 computer chips**.

Award ***[1]*** *if the candidate demonstrates how to calculate the margin of safety but makes a mathematical error.*
Award ***[2]*** *if the candidate demonstrates how to calculate the margin of safety and produces the correct answer with units / computer chips (this can be included in any other part of a candidate's answer)*
Allow OFR.

(c) Explain **one** advantage for *FT* of using job enrichment. ***[2]***

Possible advantages for *FT* of using job enrichment in their factory include:

Job enrichment **allows employees to develop their full abilities** as this method makes their **job more interesting** or **challenging**. Given that ***FT*** **is a technology company**, job enrichment allows the employees to **increase their skills** and **apply** their **creativity** to the **design** of **new computer chips**, in an **industry** in which **creativity is of the essence**.

Job enrichment **will motivate** *FT* employees. **70% of FT employees have worked** at the factory **for 15 years**. The job enrichment method **grants** the employees **more responsibility** for their **own work** and some **degree of decision-making** authority. Since *FT´*s products are recognized for their quality, allowing the employees some degree of decision-making in their design and production tasks will **contribute to increase their motivation** at work and to **maintain** the **high quality** of their **chips**.

Accept any other relevant advantage and explanation.

Mark as 1 +1

Award ***[1]*** *for an explanation of a relevant advantage and an additional* ***[1]*** *for application to FT.*
[2] *cannot be awarded if the response lacks explanation and application to FT*
For example: For an explanation of a relevant advantage with no application ***[1]****.*
For an explanation of a relevant advantage and application to FT ***[2]****.*

Section B

3. (a) Define the term *unique selling point/proposition (USP)*. ***[2]***

Unique selling point/proposition refers to the way a business distinguishes itself from its competitors. Award ***[1 mark]***

[2 mark] to be awarded for any further point raised such as:

USP adds value, creates brand loyalty, attracts the customers, allows to charge higher price, could be related to any of the elements of marketing mix, provides the businesses competitive advantage.

N.B*. no application required. Do not credit an example.*

*Candidates are **not** expected to word their definition **exactly** as above.*

*Award **[1]** for a basic definition that conveys partial knowledge and understanding and* additional ***[1]*** if the candidates to relates to any aspect further to demonstrate understanding of USP. *Maximum award: **[2]**.*

(b) (i) Explain **two** circular business models that *GX* uses to obtain rubber and steel to manufacture new tyres. ***[4]***

GX uses a **circular supply model**, as it reclaims its used tires from which the business obtains rubber and steel through a multi-stage process of chopping. Thus, the materials in *GX* tires are in a continuous loop.

GX also **uses a resource recovery model**, as it accepts any used tires (from other businesses such as car repair centres, car dealerships, and tire retailers), not just its own. So, tires that otherwise would be discarded are turned into a useful product.

GX uses product life extension model, GX extends the life of the materials (rubber and steel) by repurposing them to manufacture new tyres, which keeps the resources in use for longer.

Mark as 2+2.

*Award **[1]** for each model identified and an additional **[1]** each for correct application and explanation. Maximum award: **[4]**.*

Do not award- Sharing model and Product service system model- These are not used by GX.

(b) (ii) With reference to *GX*, explain why tyre manufacturing is unsuitable for a sharing circular business model. ***[2]***

A sharing circular business model involves multiple users sharing a product to maximize its use and reduce waste. This is unsuitable for GX because tyres are subject to wear and tear and have safety and performance limitations, cannot be shared between different vehicles (due to different models/ size), making them unsuitable for shared use across different vehicles. Also, the used tyres cannot be effectively reused in their current form, as GX needs to recycle them through a process before manufacturing new ones. A sharing circular business model would necessitate taking off tyres from vehicles for

other users to use the same on their vehicles. This would highly be inconvenient (time consuming) to vehicle users who would have to install tyres whenever they need to use their automobiles.

Award *[1] if candidate identifies any relevant reason why tyre manufacturing is unsuitable for sharing circular business model/ general idea about sharing model.*

Award additional [1] for application and explanation to GX.

(c) Using **Table 3**, explain **one** reason why *GX*'s rapid growth in sales revenue has weakened its liquidity. ***[2]***

The **rapid growth** in **sales means** that *GX* must make **more tires** and thus have **more stock**. It also means that the company is **spending more paying** for the cost of **delivery** of used tires to its manufacturing facility. For these reasons, the company must spend **down its cash**.

Current ratio decreased almost 9% (from 1.5 to 1.4) and acid test decreased 40% from 2021 to 2024 (1.0 to 0.6).

*Award **[1]** for a basic explanation related to increased trading or increasing sales or increased stock. Award an additional **[1]** for application and explanation. Award a maximum of **[2].***

(d) Using information in the stimulus, discuss whether *GX* should choose **Option 1** or **Option 2**. ***[10]***

GX is considering **two options**.

The **advantage** of **option 1** is that it is a **safe approach to stabilize the business´s financial position**. The business appears to have a **tested business model** that works. By **slowing sales** growth, *GX* can continue in a **market it knows** and is succeeding in and **strengthen** its **financial position**.

The main **disadvantage** is that by slowing sales growth it is **not gaining the market share** it otherwise might gain, which means some **other** tire companies (**competitors**) **are capturing that market share**.

The **advantage** of **option 2** is that the company would **expand** its **reach beyond** the **tires industry** where many sales opportunities exist (market with high demand of tires and other alternative uses for its rubber). This expansion would mean **new revenue streams** and, potentially, **marketing economies** of scale.

The main **disadvantage** is that *GX* would be **developing new products** and potentially entering **new markets**, both **risky** propositions. Further, *GX* would have to **form** various (**joint ventures**) relationships with other businesses, which means ***GX* would have less control** over these new ventures. Joint ventures have inherent risks, which *GX* would now be exposed to.

Award marks according to the mark bands on page 3.

4. (a) State **two** advantages of operating as a privately held company. ***[2]***

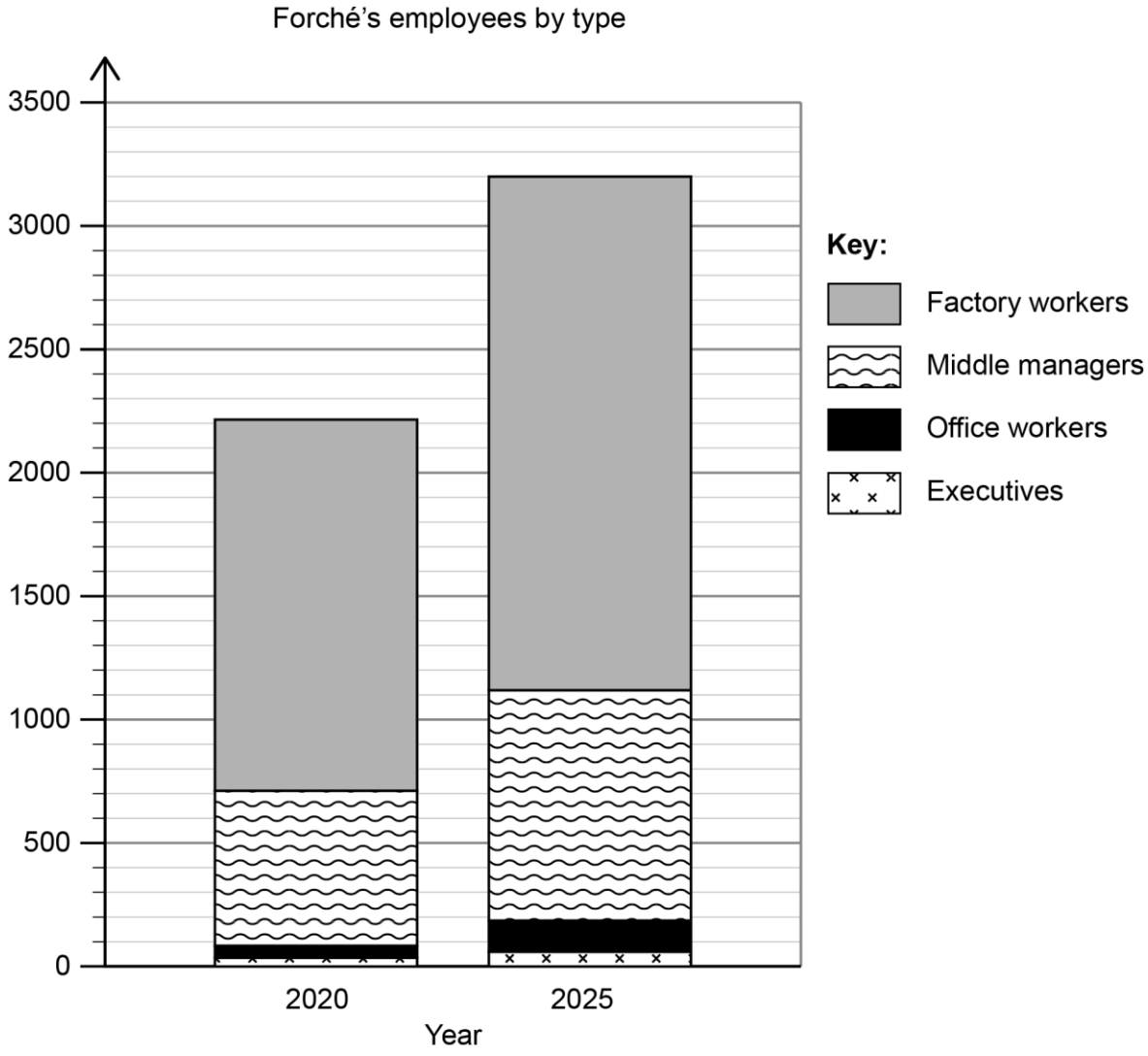
Advantages of operating as a privately held limited company include:
- company **information** can remain **private**;
- in general, is **easier** to **raise finance than** can a **sole trader**;
- **legal continuity** in the event of death of owner(s);
- **owners** have **limited liability/**reduced risk of personal liability;
- **ownership** can be **transferred** by **selling shares**;
- the business seems to have **more credibility** than a sole trader.
- More capital can be raised by issuing shares
- More control on ownership as shares are privately dealt.No threat of takeover since shares are not traded on a stock exchange

Accept any other relevant advantage. No application required.

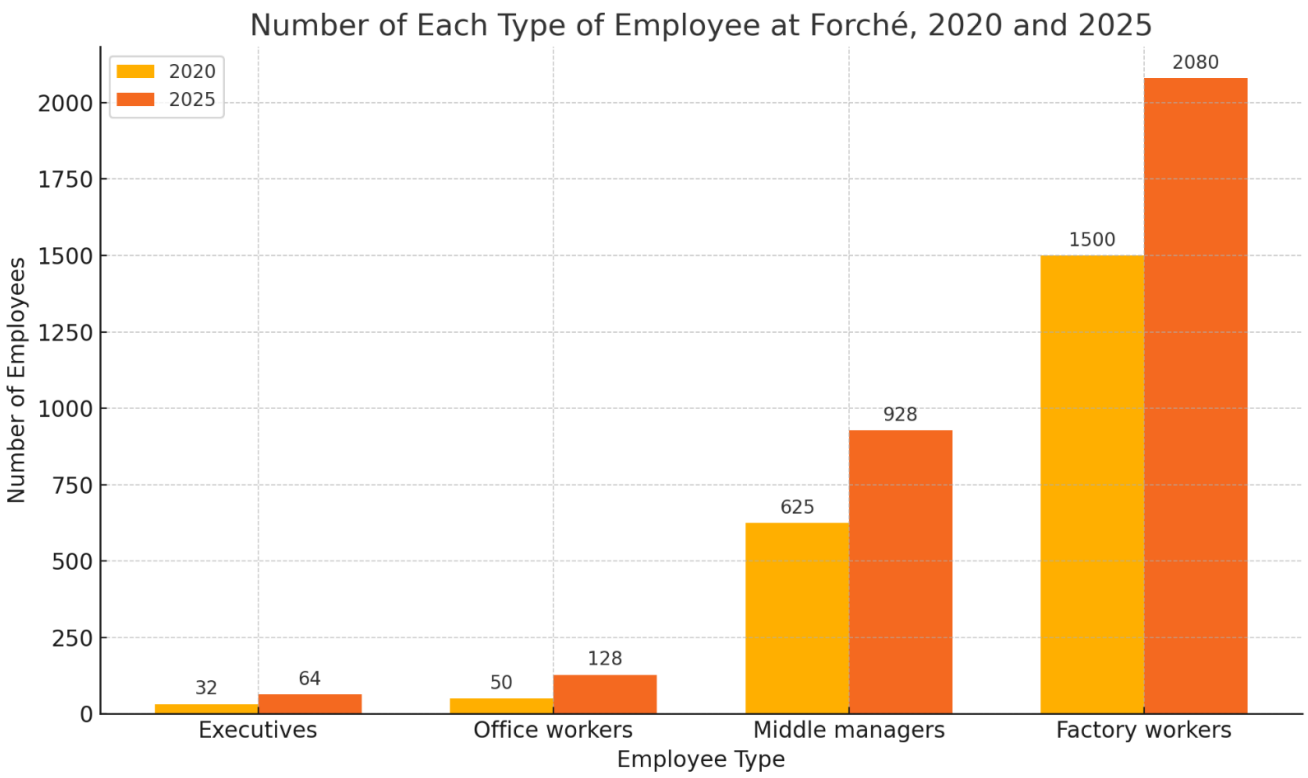
*Award **[1]** for each advantage stated, up to a maximum of **[2]**.*

(b) (i) Using **Table 4**, draw a fully labelled stacked bar chart showing *Forché*'s employees by type in 2020 and 2025. ***[4]***

Stacked bar chart



Bar Chart



[4 Marks]:

- Fully labelled stacked bar chart drawn on scale
- All 4 employee categories included
- Both years shown
- Axes and segments are clearly labelled or keyed

***[3 Marks]*:**

Stacked bar chart but not on scale/ minor issues with labelling

- Bar chart with all 4 categories, both years included, axes are labelled. There are minor issues with clarity or labels or scale

[2 Marks]:

Bar chart with all 4 categories and both years included

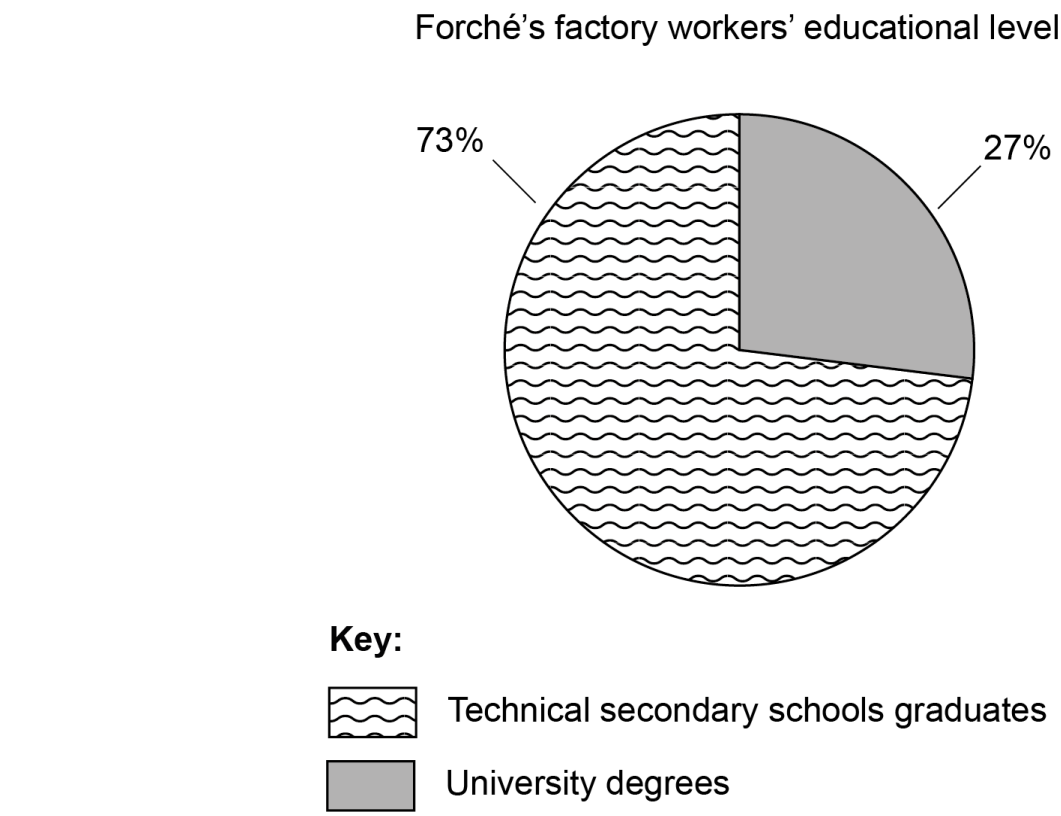
- The chart has missing labels or categories or values
- Some data or axis labels are unclear or incomplete

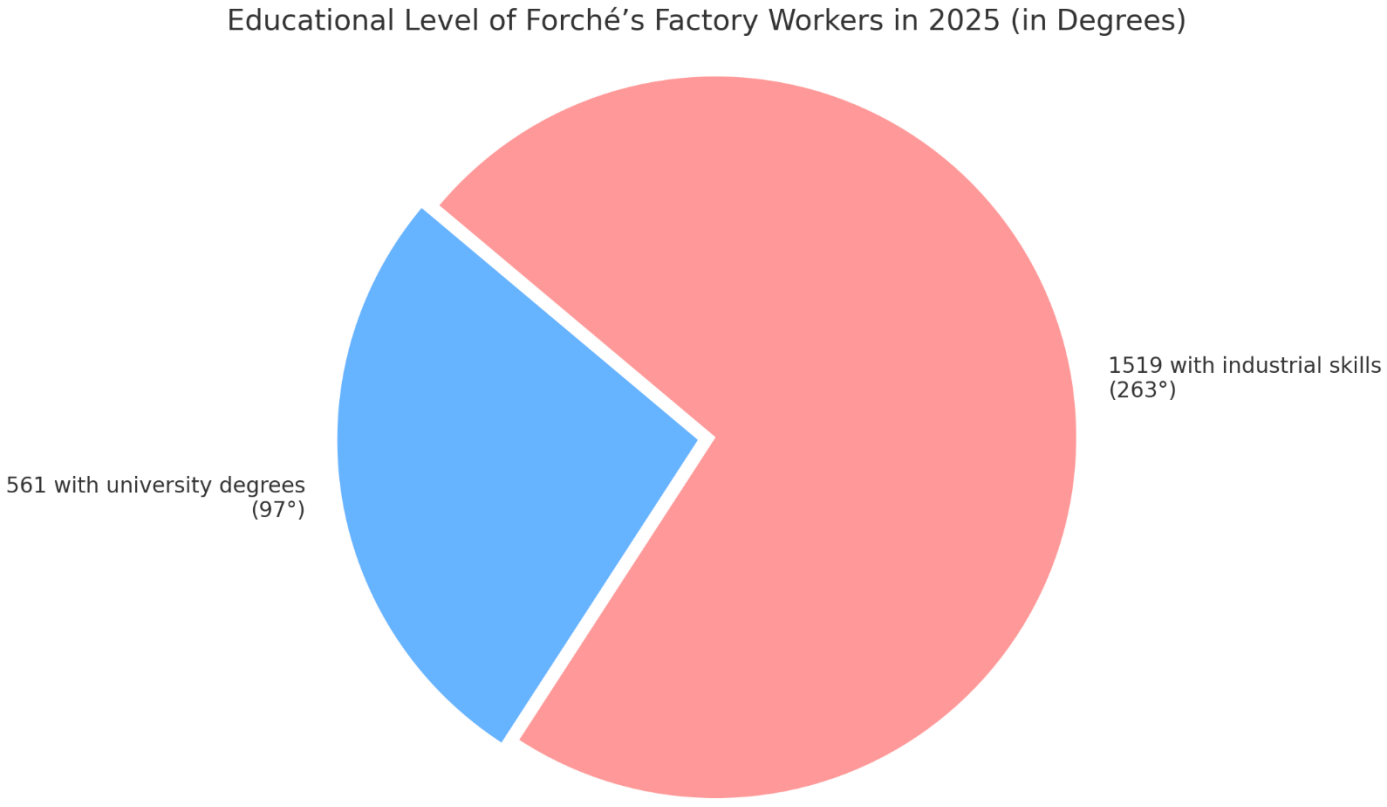
[1 Mark]:

Basic attempt at a bar chart ***[0 Mark]:***

- No understanding of a bar chart

(ii) Draw a fully labelled pie chart showing the educational level of *Forché*'s factory workers in 2025. ***[2]***





Award *[1]* for accurately drawing a pie chart that includes correct percentages or angles for each sector.

Or

a pie chart with some understanding (such as presentation with number of employees instead of percentage/ incorrect percentage)

Award an additional *[1]* for identifying factory workers with university degrees and industry-specific skills. This can be shown through a key or by clearly stating the educational qualifications of factory workers in the relevant sectors.

(c) Explain **one** change *Forché* could make to human resource management that would improve the motivation of its non-university educated factory workers. ***[2]***

Changes in **human resources management** that could improve the motivation of non-university-graduates working in the factory include:

- **Job rotation**;
- Job **enrichment**;
- Job **enlargement**.

Any one of these strategies **would give** the non-university-graduate factory workers **more variety** in their jobs. The lack of variety – **doing the same job every day** for life – was what the **workers identified** as the **least satisfying part of their job** (workers often complain among themselves that their jobs can be boring and thus demotivating).

Other relevant strategies award, such as recognition, reward systems, promotion opportunities, *etc*.

Award ***[1]*** *for stating one of the relevant human resources practices above and additional* ***[1]*** *for explanation and application to Forche. Maximum award:* ***[2]****.*

N.B. Do not award marks for extrinsic motivators, such as higher pay/ financial rewards as those types of motivators do not get at the heart of the problem.

(d) Using information in the stimulus, discuss whether *Forché* should choose **Option 1** or **Option 2** to meet growing demand. ***[10]***

Option 1
Advantages:

- Expansion of the existing factory means that **all operations** will be **in one location and fewer diseconomies of scale**;
- The Modena region **has** a critical mass of **expertise and focus** on **producing luxury cars** providing external economies of scale;
- ***Forché* gains** some **promotional benefit** for locating in Modena (Italian reputation).
- Benefits from an existing reputation for high-quality car labour and a skilled local workforce. Many of Forche's current 2080 factory workers are highly trained, and 561 have engineering degrees. This talent pipeline ensures consistent quality, essential for an $800,000 luxury car.
- Modena's branding as a luxury car hub enhances Forché's image
- Modena has traditionally high-quality labour, that would support manufacturing process.
- Involves less risk due to familiarity with culture and legislations
- Any other relevant point

Disadvantages:

- Risk of high competition in Modena since its long been a center for manufacturing expensive luxury cars, this means that numerous other luxury car manufacturers operate from Modena.
- Forche's management is concerned about the difficulty in attracting more qualified factory workers in Italy.
- Young people find it challenging to gain the required qualification.Entry into the industry requires extensive training, and this could limit the speed at which production can be scaled up to meet rising demand.
- "The cost of shipping from Modena to the U.S., along with the travel expenses for engineers, will be significant and add considerable inconvenience."
- Any other relevant point

Option 2
Advantages:

- The **US** is one of *Forché's* two **fastest growing markets**. Offshoring some production will **reduce delivery** costs **and repair costs**;
- **For major repairs, American customers would not have to deliver their cars all the way back to Italy;**
- **California has** many **wealthy people** who can **afford** a ***Forché* car**;
- California **has** many fine **universities** with **strong engineering schools** specializing in industrial skills.
- Any other relevant point to be considered

Disadvantages:

- The **culture of fine Italian craftsmanship might not easily transfer to the US**; unless a large number of *Forché* employees, of all types, are sent to start up the new factory, there may be differences in vehicle quality between countries, depending on factors such as manufacturing standards and design priorities. There could be **language and cultural difficulties**;
- **Even** if the **cars** are of **comparable quality**, even if the quality is comparable, the perceived prestige of vehicles may vary between countries, such as between the US and Italy;
- Most **factory workers are not university graduates** but people whose terminal qualification is from very good industrial secondary schools, of which the **US has no equivalent**.
- California lacks a tradition of secondary schools focused on industrial skills, which may affect the quality and availability of suitable factory workers. Moreover, setting up a new production site could raise operational risks and costs and impact brand consistency.
- Any other relevant point to be considered

Award marks according to the mark bands on page 3.