

# **Markscheme**

**Trials 2022**

**Business Management**

**Higher level**

**Paper 2**

The markbands and assessment criteria on pages 1–3 should be used where indicated in the markscheme.

Marks	Level descriptor
0	The work does not reach a standard described by the descriptors below.
1–2	<ul style="list-style-type: none"> <li>• Little understanding of the demands of the question.</li> <li>• Few business management tools (where applicable), techniques and theories are explained or applied, and business management terminology is lacking.</li> <li>• Little reference to the stimulus material.</li> </ul>
3–4	<ul style="list-style-type: none"> <li>• Some understanding of the demands of the question.</li> <li>• Some relevant business management tools (where applicable), techniques and theories are explained or applied, and some appropriate terminology is used.</li> <li>• Some reference to the stimulus material but often not going beyond the name of a person(s) and/or the name of the organization.</li> </ul>
5–6	<ul style="list-style-type: none"> <li>• Understanding of most of the demands of the question.</li> <li>• Relevant business management tools (where applicable), techniques and theories are explained and applied, and appropriate terminology is used most of the time.</li> <li>• Some reference to the stimulus material that goes beyond the name of a person(s) and/or the name of the organization.</li> <li>• Some evidence of a balanced response.</li> <li>• Some judgments are relevant but not substantiated.</li> </ul>
7–8	<ul style="list-style-type: none"> <li>• Good understanding of the demands of the question.</li> <li>• Relevant business management tools (where applicable), techniques and theories are explained and applied well, and appropriate terminology is used.</li> <li>• Good reference to the stimulus material.</li> <li>• Good evidence of a balanced response.</li> <li>• The judgments are relevant but not always well substantiated.</li> </ul>
9–10	<ul style="list-style-type: none"> <li>• Good understanding of the demands of the question, including implications, where relevant.</li> <li>• Relevant business management tools (where applicable), techniques and theories are explained clearly and applied purposefully, and appropriate terminology is used throughout the response.</li> <li>• Effective use of the stimulus material in a way that significantly strengthens the response.</li> <li>• Evidence of balance is consistent throughout the response.</li> <li>• The judgments are relevant and well substantiated.</li> </ul>

## Section A

1. (a) State **two** features of debt factoring.

[2]

Debt factoring:

- is short-term form of finance
- is an external source of finance
- enables a business to receive immediate cash from the factor, instead of waiting for its customers to pay their invoice.

Another feature is that the business selling its invoices does not receive the full value of the invoices as factor makes a charge (buys at a discount).

*If a candidate defines debt factoring accurately, award at least [1] for some understanding. Examiners should review the definition to determine if, in defining the term, candidates have included at least two features. If so, award [1] for each feature up to [2]. Maximum award: [2].*

*Award [1] for each feature identified up to a maximum of [2].*

- (b) Using the information in **Table 1**, construct a fully labelled cash flow forecast for MV for the first six months of 2021.

[6]

*Award [1] if the candidate has some idea of a six-month cash-flow forecast but otherwise has numerous errors. Award [2] if the cash flow has four or more errors or has a largely inaccurate format. Award [3] if it is largely formatted correctly and/or has three errors. Award [4] for a correctly formatted forecast with just two errors. Award [5] for a correctly formatted forecast with just one error.*

*Award [6] for a correctly formatted and mathematically correct forecast.*

**MiniVS Cash flow forecast 2021**

	Jan	Feb	Mar	Apr	May	Jun
Opening balance	20 000	21 500	23 000	24 500	23 500	22 500
Income	75 000	75 000	75 000	70 000	70 000	70 000
Outgoings:						
Cost of sales	37 500	37 500	37 500	35 000	35 000	35 000
Marketing	1000	1000	1000	1000	1000	1000
warehouse						
Overheads	5000	5000	5000	5000	5000	5000
Office salaries	30 000	30 000	30 000	30 000	30 000	30 000
Total outgoings	73 500	73 500	73 500	71 000	71 000	71 000
Net cash flow	1500	1500	1500	−1000	−1000	−1000
Closing balance	21 500	23 000	24 500	23 500	22 500	21 500

*Some possibility exists that candidates will misinterpret one portion of the stimulus and think that marketing, warehouse overheads, and office salaries total 36 000 for the three-month period Jan – Mar. and for the three-month period Apr – Jun. If a candidate interprets the stimulus in that fashion, accept as accurate provided that the candidate consistently applies the stimulus based upon that interpretation.*

- (c) Explain the potential impact on MV's gross profit margin if the prices charged by its suppliers increase in the second half of 2021.

[2]

MV's gross profit margin is forecast to be 50 % for the first half of 2021.

Eg  $\frac{75\,000 - 37\,500}{75\,000}$  for months 1 to 3 OR  $\frac{70\,000 - 35\,000}{70\,000}$  for months 4 to 6.

If supplier prices increase in the second half of 2021 and the finance director is correct that the online market for light bulbs in the UK will become increasingly price competitive, MV's gross profit margin would fall. Under this scenario, MV would be unable to pass on to its customers the increase in prices that it, MV, is paying to suppliers. The margin would fall below 50 %.

*If the candidate says "the margin will decrease" but with no clear explanation and application to the stimulus, award [1].*

*Award [1] for a basic explanation that conveys partial understanding.*

*Award [2] for a full explanation that conveys knowledge and understanding similar to the above.*

2. (a) Define the term *price discrimination*.

[2]

Price discrimination is when a firm charges a different price to different groups of consumers for an identical good or service.

*Award [1] for a basic definition conveying the idea that it allows a business to sell the same goods/services at different prices. Award an additional [1] for stating the differing prices are for different groups of consumers that can be separated in some way.*

*A candidate may achieve the second mark through the use of a good exemplar, eg by explaining that a cinema charges higher prices for adults than for children.*

- (b) Using **Table 2**, calculate:

- (i) **X** (no working required);

[1]

X = Gross profit

Gross profit = Sales revenue – costs of goods sold

= \$175 000 – £122 000 = \$53 000

*Award [1] for correct answer with or without working.*

- (ii) the current ratio for 2019 (no working required).

[1]

Current ratio  $\square \frac{\text{current assets}}{\text{current liabilities}}$

$\square \frac{\$8330}{\$6800} = 1.23$

- (c) Using **Table 2**, prepare a balance sheet for the year ending 31 December 2019.

[4]

Balance sheet as of 31 December 2019			
Net fixed assets			63 000
Total current assets		8330	
Total current liabilities		6800	
Net current assets			1530
Total assets less current liabilities			64 530
Long-term liabilities		2800	
Net assets			61 730
financed by:			
share capital		60 000	
retained profit		1730	
Equity			61 730

*Award [4] if the candidate constructs an accurate balance sheet (that balances) according to the IB prescribed format.*

*Award [3] for a largely accurate balance sheet that balances, according to a generally accepted format, such as the vertical format above or the horizontal model typically used in the United States.*

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

*Award [1] if the candidate conveys some idea of what a balance sheet is.*

*For full marks, the balance sheet must be dated. Failure to date the balance sheet is an error and, therefore, the maximum award that an undated balance sheet could receive is [3].*

- (d) Explain the possible changes to KPJ's balance sheet for 2019 if KPJ spent \$30 000 on a new digital projector. [2]

The purchase of a new digital projector will increase net fixed assets by \$30 000. Award [1] for recognizing that the net fixed assets will increase. Award [1] if the candidate then addresses the offset, which could be

- a reduction in cash
- an increase in long-term debt (KPJ takes out a long-term loan).

Accept any other reasonable suggestion for financing the projector. Do not accept a short-term loan or expansion of trade credit.

*The two potential marks for this question are independent of one another. In other words, a candidate may address the financing (the candidate suggests taking out a bank loan) and receive [1] even if s/he did not mention that net fixed assets will increase. Or, the candidate could state that net fixed assets will increase but not mention the offset, in which case the candidate would receive [1].*

*Maximum award: [2].*

## Section B

### 3. Ultima Motors

(a) Define the term *vision statement*.

[2]

A vision statement is a statement of what the organisation would like to achieve or accomplish in the long term

*Candidates do not have to have wording exactly as above.*

*Award [1] for some understanding of vision statements (such as what businesses want to achieve) and [1] for additional wording that gives precision ("the understanding that this is long term").*

*NB. Do not award beyond [1] mark if the response does not make the reference to long term*

(b) With reference to Ultima motors, explain two non - financial rewards that have been used to increase motivation [4]

Possible non - financial rewards include:

Job enlargement, job enrichment, job rotation, team working, empowerment Accept any other relevant non-financial reward

*Possible Application:*

*Ultimas' introduction of lean production and JIT has meant that the culture of the business has had to be adjusted to one, which requires delegation and empowerment. Ultima has implemented workshops for managers and employees to promote participation. Training of the workforce is substantial to support continuous improvement. The focus is on individuals working in self-contained groups identifying a need for change and driving it through. These centres of excellence have led to increases in productivity, pride and commitment.*

**Mark as 2 + 2.**

*Award [1] for a basic answer that identifies a non financial reward.*

*Award [1] for an answer that identifies/explains how using non financial rewards increase motivation.*

*Award [2] for an answer that identifies/explains how using non-financial rewards increases motivation and which is suitably applied to Ultima.*

**Mark as 2 + 2.**

**(c) Explain two advantages for Ultima of adopting JIT production at the Halewood plant. [4]**

Just in time (JIT) is a manufacturing system designed to minimize stocks of raw materials, work-in-progress and finished goods, by planning the arrival and flow of resources through the factory.

**Advantages:**

Reduces waste and stocks lying idle and tying up capital

By reducing stocks it may improve cash flow

Stocks are only ordered when they are needed as production only takes place when there is demand for the finished goods.

The right quantities are purchased at the right time

Reduces space requirements

Improves customer service

Leads to increased employee participation

Reduces manufacturing lead time

Simpler planning systems

Emphasis on continuous improvement

Better use of machinery and equipment.

**Mark as 2 + 2.**

Award **[1]** for a basic answer that identifies an advantage of using JIT. Award **[1]** for an answer that identifies/explains an advantage JIT.

Award **[2]** for an answer that identifies/explains an advantage of using JIT and which is suitably applied to Ultima

**Mark as 2 + 2.**

**(d) Evaluate the methods used for developing a total quality culture at Ultima Motors [10]**

A total quality culture is where managers ensure that all activities are planned to meet customer requirements with quality as the core focus. Quality is the responsibility of every employee not just the traditional quality control department. Every employee is empowered to take action if quality is unacceptable. The objective is zero defects and all procedures should be monitored to ensure they meet set standards. Employees work in teams to share skills and ideas. They should regard all the people they work for and deal with as customers, even if they work for the same organization. The object of a total quality approach is to provide a competitive edge.



How can this be achieved? Possible methods include:

Benchmarking  
Statistical process control techniques  
Quality assurance procedures and performance targets  
Continuous improvement/Kaizen  
Prevention rather than cure – aim for zero defects  
Quality circles/Kaizen groups  
Total quality management (TQM)  
Training  
Empowerment  
Appropriate mission statement and policy statements  
Audits  
Participation in decision making  
Flat organizational hierarchy/re-engineering  
Group work  
Identifying consumer needs  
Top management support and guidance  
Commitment of the whole workforce  
Seeking quality  
standards Investment in  
people Cell production.

Kaizen should not be perceived as a fix-all. Some commentators believe it is a fad. There are considerable expenses involved in training the workforce to be able to take the necessary responsibility and to maintain the process.

A potential problem may be increased bureaucracy.

This is an ongoing process and must be maintained through appropriate recruitment and training. Some say that the diminishing returns operate with Kaizen approaches. It may be necessary at times to look at underlying principles rather than just incremental improvements. Total re-engineering may be a more radical approach.

Stakeholders must also support the process so that short term demands for example, for higher dividends, do not risk quality gains.

Accept any other relevant discussion.

Marks should be allocated according to the markbands on page 2.

## 4. CSS

- (a) Define the term *public sector*. [2]

The public sector involves those areas of the economy that are provided by the government and typically include what is deemed government itself (local, regional, state, national) and the various services provided by government, including education, health care, public transportation, police, fire brigades and other functions.

*Award [1] for a basic definition that conveys partial knowledge and understanding.*

*Award [2] for a full, clear definition that conveys knowledge and understanding.*

- (b) Explain **one** advantage **and one** disadvantage for CSS of introducing an employee share ownership scheme. [4]

Advantages of introducing an employee share ownership scheme include:

- employees have a greater economic stake in the business and, thus, may be more motivated
- CSS has a means to offer additional compensation to employees that does not increase salary/bonus expenses
- employee share ownership plans usually decrease labour turnover and make it easier to recruit people.

Disadvantages of introducing an employee share ownership scheme include:

- management of CSS, Ebru, will have to answer to shareholders other than herself once the plan is in place, it will have administrative and legal costs
- if the business is not publicly traded, valuation of shares may prove difficult.

*Accept any other relevant advantage or disadvantage.*

**Mark as a 2 + 2.**

*Award [1] for identification of an appropriate advantage/disadvantage and an additional [1] for an explanation and application to the stimulus. Application may not be merely nominal.*

*Maximum award per advantage/disadvantage: [2]*

- (c) Explain **one** advantage **and one** disadvantage for CSS of implementing a project-based organizational structure (**Change 1**). [4]

Advantages for CSS of implementing a project-based organizational structure include:

- improved communication between people with different areas of expertise
- sense of teamwork, which can increase motivation.

Disadvantages for CSS of implementing a project-based organizational structure include:

- blurred lines of authority, which may create confusing circumstances for employees
- often, project-based structures are more expensive than traditional structures, as there may be dual levels of management, one on the team and one over groups of teams
- potential for internal conflict within a team.

*Accept any other relevant advantage or disadvantage.*

**Mark as 2 + 2.**

*Award [1] for identification of an appropriate advantage/disadvantage and an additional [1] for an explanation and application to the stimulus. Application may not be merely nominal.*

*Maximum award per advantage/disadvantage: [2]*

- (d) With reference to Adams's equity theory and Daniel Pink's motivation theory, discuss Ebru's decision to eliminate performance-related pay (PRP) (**Change 2**) and to allow employees to spend 20 % of their time on any project they wish (**Change 3**).

**[10]**

Adams's equity theory asserts that employee motivation emerges out of employees' perceived sense of fairness, both between the employee and the firm and among the employees. With respect to the firm, employees must believe that an equitable relationship exists between their inputs (hours work, effort, etc) and outputs (compensation, benefits, etc). With respect to other employees, an employee must believe that fairness exists: that there is an equitable relationship between the inputs of other employees and their outputs.

Daniel Pink's theory of motivation rests on the notion of autonomy, mastery, and purpose. Money is not the chief motivator of professional level employees, but rather their desire for autonomy (or near autonomy) in the workplace, their ability to master their profession or skill set, and their sense of doing something with purpose beyond themselves.

The elimination of PRP could affect some employees' sense of equity. If, before the elimination, employees had considered that an equitable relationship existed between inputs and outputs, they now might think that the relationship is no longer equitable, especially if they continued to work on CSS-assigned projects during their 20 % dream project time. Though elimination of PRP would save CSS money, it may negatively affect the motivation of some employees.

On the other hand, Daniel Pink's theory helps to explain why some employees like the changes, especially the introduction of the 20 % dream project time. To these employees, money was not the most important consideration, but having the freedom and flexibility to pursue their own ideas. They would have, at least during the 20 % time, autonomy. The time would allow them to strengthen their skill set in

areas where they were weak or to work on issues that played to the skills they had already mastered. And, by working on a dream project, they had a greater sense of purpose. Giving employees 20 % of their time to work on whatever they wanted has the potential to be costly in terms of CSS's core activities. The question is whether it will sufficiently improve employee motivation to make up for the time lost or if it will lead to some valuable new products and services.

*Accept any other relevant evaluation.*

*Marks should be allocated according to the markbands on page 5 with further guidance below.*

*For one of the two motivation theories that is one-sided, award up to **[3]**. For more than one relevant motivation theory that is one-sided, award up to a maximum of **[4]**.*

*If a candidate evaluates / addresses only one motivation theory, award a maximum of **[5]**.*

*Award a maximum of **[6]** if the answer is of a standard that shows balanced analysis and understanding throughout the response with reference to the stimulus material but there is no judgment/conclusion.*

*Candidates cannot reach the **[7–8]** markband if they give judgment/conclusions that are not based on analysis/explanation already given in their answer*

## 5. Advanced Electrics Co. (AEC)

(a) Identify **two** features of e-commerce.

[2]

Two features of e-commerce are that it allows for:

- the business, goods and services it sells are available electronically via the internet, 24 / 7.
- national or global reach of customers beyond local borders
- instant / quick / cheap two-way communication between businesses and customers without the need for face-to-face meetings
- targeting of marketing messages to personal customer requirements
- *accept any other relevant feature.*

*Award [1] for each feature of e-commerce identified up to a maximum of [2].*

(b) Explain **two** problems, **other than** liquidity, for AEC, of rapid sales growth.

[4]

When sales grow rapidly; the demand on a firm's stock inventory increases. There are risks of "overtrading" (although this term is not expected).

The demand on firms stock (inventory) increases and unless AEC is able to re-stock quickly, it may find that it does not have enough goods to sell to meet demand and customers may become dissatisfied and may choose competitors if deliveries fail to keep up. Customers' patience will be tested and even though AEC's USP keeps customers loyal, this "lack of stock" aspect may make customers move to competitors.

AEC is to reach full capacity within a few years. Working at full or near full capacity can exert extra pressure on employees and managers, higher costs for the maintenance as well as depreciation of the machines. Moreover, extra pressure can result in a fall in quality. Its USP may be eroded.

Rapid sales growth must also be accompanied with increased managerial efficiency and improved customer service to maintain their loyalty in the latter.

There will also be pressure on their supply chains and distribution channels to ensure that deliveries are on time. AEC may have to find new channels especially as B2B e-commerce grows further.

**Mark as 2+2.**

*Award [1] for an appropriate identification of a problem from rapid sales growth and an additional [1] for explanation and application to AEC. Award a maximum of [2]. If there is **no application**, award a maximum of [1].*

(c) Analyse the possible impact on pricing and place in the marketing mix, if AEC moves from its current location (**Option 1**). **[4]**

Location has importance to AEC's pricing element in the marketing mix. At present AEC's unique selling point (USP) is lower price than producers of similar products of comparable quality. Thus, at present, many of AEC's customers get the product they want at a better price than other similar manufacturers' offerings and at a convenient location.

**Some possible issues regarding place:**

Currently, **the location** is very convenient to most of its customers who are located nearby in the city centre location. If AEC moves 27 kilometres away as Option 1 suggests, its location will be less convenient for its customers who may move to competitors.

5% of AEC's sales are online – **a place** and that percentage is growing. To these customers, where AEC is located is less important. At present, the percentage of customers who purchase online is low enough not to be a significant factor in the analysis of place in AEC's marketing mix. Over time, however, that will change.

**Some possible issues regarding pricing:**

Additional costs might occur that might be passed on to its customers for more expensive product delivery. AEC may have to find new supply chain partners.

The **prices** for delivered products may rise which conflicts with AEC's USP. Especially if one of AEC's competitors is located in the city centre.

**However**, the new factory will result in significantly lower costs. Hence AEC will be able to maintain **the price** / its competitiveness or even enhance its competitiveness by reducing the price.

If Option 1 leads to an increase in growth, further economies of scale are likely and price reductions could be possible. **However**, if the additional delivery costs increase prices and outweigh these economies of scale, the price differential that AEC currently enjoys over competitors, would be reduced. The move could hurt AEC's USP and lead to a reduction in sales volume and revenue.

Also older skilled workers may rather retire than commute. New workers could be hired which may affect motivation, productivity and staff turnover resulting in increased costs which consequently might increase the price or reduce profit.

*It is not expected that the candidate covers all of the above issues.*

*It is not expected that the candidate divides the answer into the two separate issues as above.*

**N.B.** HR issues are not part of the marketing mix. Award only if there is a direct link made to the effect on price, or the methods of distribution (less people are needed when using e-commerce).

*A reference to costs or profit, without a link to the effect on the price should not be regarded as complete coverage and application.*

**Mark as 2+2.**

*Award [1] for an appropriate identification of impact on price / place and [1] for explanation and application to AEC. Award a maximum of [2]. If there is **no application**, award a maximum of [1].*

(d) Discuss AEC's **Option 2** to solve its liquidity problem.

**[10]**

Option 2 includes three strategies / actions. **Sell the factory and lease it back** from the purchaser, change to a **just-in-time stock control** management and **shorten the credit terms** given to customers from 30 to 15 days.

Option 2, especially **selling the factory** provides a one-off short-term windfall / cash injection to the company, but leasing costs will need to be considered over the longer term and there is no information in the stimulus to say how significant this could be.

The liquidity problem may be solved when the first aspect of Option 2 is completed, but AEC loses its most valuable asset in a prime city centre location. One may judge this point as a very significant argument as AEC will have an uncertain expense in the future when and if the lease costs increases.

Other aspects / strategies of Option 2 could help AEC solve its liquidity problem as both **just in time** and **shorter credit terms** for customers would reduce cash outflow and increase cash inflow. **However**, just-in-time stock control can be difficult and expensive to set up and manage. It makes AEC more dependent on reliable and timely delivery of raw materials. Cash may be needed to implement the new system including training.

If suppliers are not timely and reliable, AEC could end up not meeting its schedules and irritating customers – reducing cash inflows and making the liquidity problem worse.

**However**, with reduced funds tied-up in stock, compared to the current just-in-case method, cash outflows would be better managed and AEC will not have unproductive assets / money tied up in stock. The cash outflow could be smaller, although more frequent, depending on the nature of the new supplier relationships to create just-in-time. Still, AEC can negotiate better credit with its suppliers instead of changing the stock management system.

As for **shorter credit terms**, AEC's customers may object to the shorter credit terms, which would not align with industry standards. Changing credit terms at short notice may not be possible given that AEC's customers may also have to renegotiate with their own customers. (Goodwill in the whole industry may be reduced given the interdependence of cash flow.)

With a considerably shorter credit terms of 15 days only which is below the industry average, AEC's customers' may not have the finance to pay. Customers might go to AEC's competitors just for the more favourable credit terms despite AEC's USP. Again customer loyalty for AEC will be tested

given rise to future liquidity issues. **However**, if customers are willing and able to pay, especially if the quality is perceived higher than the competitors, a reduction from 30 days to 15 days is a significant one and would enable AEC to have the cash quicker, hence the liquidity problem might be reduced.

In conclusion, it is expected that the candidate will come up with a substantiated conclusion. The candidate may suggest that further negotiation and discussion of credit terms will be needed as well as investigating and forming new supply chain relationships for just-in-time to operate. This will take time for AEC to achieve.

*Accept any other relevant discussion and arguments.*

*It is not expected that the candidate incorporates all of the above arguments.*

**N.B.** it is expected that the candidate refers to **all of the strategies / actions**: sell and lease back, reduce credit terms/time and change to just in time, with one argument for and one argument against **each strategy / action** for a balanced response.

**N.B.** for one relevant argument for one **strategy / action** that is one-sided, award up to **[2]**. For more than one relevant argument for one **strategy / action** that is one-sided, award up to a maximum of **[3]**.

For two balanced **strategies / actions** with a judgment award up to **[6]**.

Award a maximum of **[5]** if the answer is of a standard that shows balanced analysis and understanding throughout the response with reference to the stimulus material but there is **no** judgment/conclusion.

Candidates cannot reach the **[5–7]** markband if they give judgment/conclusions that are not based on analysis/explanation already given in their answer.

For the top markband it is expected that the candidate provides a balanced analysis of the three **strategies / actions** with a substantiated judgment.

Marks should be allocated according to the markbands on page 2.