## MARK SCHEME for the May/June 2012 question paper for the guidance of teachers

## 0450 BUSINESS STUDIES

0450/21 Paper 2 (Case Study), maximum raw mark 100

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes must be read in conjunction with the question papers and the report on the examination.

- Cambridge will not enter into discussions or correspondence in connection with these mark schemes.

Cambridge is publishing the mark schemes for the May/June 2012 question papers for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level syllabuses and some Ordinary Level syllabuses.

| Page 2 | Mark Scheme: Teachers' version | Syllabus | Paper |
| :---: | :---: | :---: | :---: |
|  | IGCSE - May/June 2012 | 0450 | 21 |

This mark scheme includes a summary of appropriate content for answering each question. It should be emphasised, however, that this material is for illustrative purposes and is not intended to provide a definitive guide to acceptable answers. It is quite possible that among the scripts there will be some candidate answers that are not covered directly by the content of this mark scheme. In such cases, professional judgement should be exercised in assessing the merits of the answer and the senior examiners should be consulted if further guidance is required.

Examples of possible answers are also included in this mark scheme. Again, it should be emphasised that this is for illustrative purposes and the examples chosen represent only some of the many possible responses that would merit reward.

Application marks are not awarded for the name of the business or person from the case material. Application is by answering in the context of the case or by using the information in the case to help answer the question.

1 (a) The new football boot is being developed. Identify and explain four stages of the future product life cycle of the new football boot.

Content:

- Introduction/Launch
- Growth
- Maturity
- Saturation
- Decline.

NB The order of the stages is not important for this question.
Explanation marks are likely to be for reference to one or more of the following: sales; competition; profit; demand; pricing/pricing strategy; advertising.

The marks available for this question are as follows: 4 marks for knowledge; 4 marks for explanation.

1 mark for each stage identified plus 1 explanation mark for each stage.
1 knowledge mark +1 explanation mark ( 2 marks $\times 4$ stages)
For example:
The introduction stage ( 1 knowledge mark) is when the new product is launched onto the market and the sales start to grow quickly. (1 explanation mark)

| Page 3 | Mark Scheme: Teachers' version | Syllabus | Paper |
| :---: | :---: | :---: | :---: |
|  | IGCSE - May/June 2012 | 0450 | 21 |

(b) Consider why each of the following departments will be important to the success of the new football boots. Justify your answer using information in the case.

## Content:

Production e.g. important to produce the football boots efficiently and to a high quality.
Marketing e.g. the new boots need to be launched onto the market and consumers need to be persuaded to buy them.

Human resources e.g. new employees need to be employed with the correct skills or arrange training.

Finance e.g. to ensure cash flow is kept under control.
Level 1 e.g. production department has to ensure the football boots are produced without faults. 1 mark for each statement.

Level 2 e.g. production department has to ensure the football boots are produced without faults otherwise customers will think they are not getting a high quality football boot and will not be willing to pay a high price for the football boot. They need to be produced efficiently because costs need to be kept down so that profits will be high. 6 marks for level 2 answer.

Possible application marks:
football boots/boots; worldwide sales; already manufacturing sports shoes; high quality; competitive market; small market share; helps footballers to kick the ball more accurately; patent; expand production; employ new workers and managers; no links with agents or retail businesses abroad; labour intensive/capital intensive; football players; $\$ 1 \mathrm{~m}$ share capital; reference to figures in Appendix 1 or 3.

There may be other examples in context which have not been included here.

|  | Application | Knowledge/Analysis/Evaluation |
| :---: | :--- | :--- |
| Level 2 | 2 marks <br> Well applied to case. At least two <br> examples of reference to, or use <br> of, the case. | $5-10$ marks <br> Good discussion of the role of each <br> department. <br> Judgement shown about the <br> importance of each department to the <br> success of the new product. |
| Level 1 | 1 mark <br> Limited application to the case. At <br> least one example of reference to, <br> or use of, the case. | 1-4 marks <br> Outline of the role of each department. |


| Page 4 | Mark Scheme: Teachers' version | Syllabus | Paper |
| :---: | :---: | :---: | :---: |
|  | IGCSE - May/June 2012 | 0450 | 21 |

2 (a) KSS production workers are highly skilled in doing just one task on the production line. Identify and explain two advantages and two disadvantages of workers being skilled in just one task.

## Content:

## Advantage

- increased production/output
- increased efficiency/productivity
- less training required
- skilled workers have higher pay
- quality improved.


## Disadvantage

- monotonous for workers
- less variation of products
- workers cannot do other jobs as specialised in one task
- absence disrupts production
- quality could be worse if workers are bored.

Do not reward the reverse argument unless explained e.g. advantage - quality improves and disadvantage - quality deteriorates = 1 mark only as no further explanation of why quality might change.

1 knowledge mark +1 explanation mark. (2 marks $\times 2$ advantages/2 disadvantages)

Advantage: Less training will be required. (1 knowledge mark)
Explanation: Less training will be required as the worker only has to learn one task and they can do this quickly. (1 additional mark for explanation)

| Page 5 | Mark Scheme: Teachers' version | Syllabus | Paper |
| :---: | :---: | :---: | :---: |
|  | IGCSE - May/June 2012 | 0450 | 21 |

(b) The Production manager believes that labour-intensive methods are better than capital-intensive methods of production for the new football boots. Do you agree with him? Justify your answer using appropriate calculations from the information provided in Appendix 1.

## Content:

- Employs more workers (L1)
- Lower wages for labour-intensive methods (L1)
- More shoes produced per worker (L1)
- $200 \% / 50 \%$ difference in output (L1)
- Calculations of total wages per day (L1).

| Labour intensive | Capital intensive |
| :---: | :---: |
| 100 people $\times \$ 5 \times 8$ hours $\times 5$ days (L1) | 3 people $\times \$ 20 \times 8$ hours $\times 5$ days (L1) |
| $100 \times 5=500$ (L1), $500 \times 8=4000$ (L1) | $3 \times 20=60$ (L1), $60 \times 8=480$ (L1) |
| \$4000 $\times 5=\$ 20000$ (L2) | $\begin{aligned} \$ 480 \times 5= & \begin{array}{l} \$ 2400 \text { per week (L2) } \\ \\ \\ \text { (or } \$ 27400) \end{array} \end{aligned}$ |
| (2500 shoes per week) | (5000 shoes per week) |
| = \$8 per shoe (L2) | = \$0.48 labour costs per shoe (L2) |
|  | Lease $\$ 25$ 000/5000 = \$5 per shoe (L1) |
|  | Total cost $=\mathbf{\$ 5 . 4 8}$ per shoe ( $\mathrm{L} 2 \times 2$ ) |

Level 1 e.g. capital-intensive uses machines to replace workers.
1 mark for each statement.
Level 2 e.g. capital-intensive uses machines to replace workers. This means they can achieve output with significantly fewer workers and lower total wage costs but at the expense of leasing machinery. 5 marks for level 2 answer.

Level 3 Detailed discussion of at least three level 2 answers. There will be a conclusion at the end which justifies which production method would be the most effective and why.

| Page 6 | Mark Scheme: Teachers' version | Syllabus | Paper |
| :---: | :---: | :---: | :---: |
|  | IGCSE - May/June 2012 | 0450 | 21 |


|  | Knowledge/Application/Analysis/Evaluation |
| :---: | :--- |
| Level 3 | 9-12 marks <br> Three $\mathbf{x}$ Level 2 calculations + Good judgement shown as to the best <br> production method and why not the other method (comparison made). |
| Level 2 | 5-8 marks <br> Explanation about each of the production methods/ L2 calculations <br> undertaken. |
| Limited judgement shown in conclusion using 2 calculations (can be L1 <br> calculations) about which method is most suitable. |  |
| Level 1 | 1-4 marks <br> Definition of labour-intensive/capital-intensive = L1 each. <br> Statements about product methods/simple L1 calculations made. |

3 (a) Good communication is important to Emmanuel. He has the following information to communicate.

- All employees are to receive a wage increase.
- There has been an error with a delivery of some supplies.

Identify a suitable method of communication for each situation. Explain why each method is suitable.

## Content:

- All employees are to receive a wage increase - notice board, letter, meeting, email, intranet (not internet)
- An error with a delivery of supplies - telephone, email, fax.

NB Do not reward generic methods of communication.
1 mark for each suitable method identified (2 marks max). Three further marks are available for explaining why the method will be effective.

1 knowledge mark + up to 3 explanation marks ( 4 marks $\times 2$ methods).
For example:
(i) He could use a letter (1 mark for knowledge) to inform the workers that they are to be given a wage increase. This would be suitable because all employees will receive the letter at home (1). This will ensure that all the employees will be informed personally (1) and so there should be no misunderstanding or employees missing the message as they are on holiday or ill (1).

| Page 7 | Mark Scheme: Teachers' version | Syllabus | Paper |
| :---: | :---: | :---: | :---: |
|  | IGCSE - May/June 2012 | 0450 | 21 |

(b) Labour costs are much lower in other countries. Many sports shoe manufacturers produce in those countries. Consider the advantages and the disadvantages to KSS of manufacturing its football boots in another country. Do you think KSS should move manufacturing to another country? Justify your answer.

## Content:

| Advantage | Disadvantage |
| :--- | :--- |
| low wages | communication more difficult |
| leads to lower costs | more difficult to control |
| lower prices | difficult to stop other business copying the <br> design |
| fewer legal restrictions | workers might not be so well trained |
| lower taxes | poor availability of materials/resources |
| reduced transport costs of finished product | language barriers |

Level 1 e.g. if they move to a country where labour costs are much lower then costs of production of the football boots will be lowered. 1 mark for each statement.

Level 2 e.g. if they move to a country where labour costs are much lower then costs of production of the football boots will be lowered. The labour costs may be lower but the workers may be less well trained and so may be less efficient when producing the football boot (L2). This will either increase the cost of training the production workers or the quality of the boot may be lower and this will lead to a poor reputation (L2). 6 marks for a good level 2 answer.

Level 3 Detailed discussion of at least three level 2 answers. There will be a conclusion at the end which justifies whether or not they should move manufacturing and why.

Possible application marks:
Football boots/boots; set up 10 years ago; competitive market; patent; expand production; employ new workers and managers; no links with agents or retail businesses abroad; sell all over the world; labour intensive/capital intensive; football players.

There may be other examples in context which have not been included here.

| Page 8 | Mark Scheme: Teachers' version | Syllabus | Paper |
| :---: | :---: | :---: | :---: |
|  | IGCSE - May/June 2012 | 0450 | 21 |


|  | Application | Knowledge/Analysis/Evaluation |
| :---: | :--- | :--- |
| Level 3 | 9-10 marks <br> Three $\times$ Level 2 + Good judgement shown <br> as to whether or not to move. |  |
| Level 2 | 2 marks <br> Well applied to case. At <br> least two examples of <br> reference to, or use of, the <br> case. | 5-8 marks <br> Advantages and/or disadvantages <br> discussed. |
| Level 1 | 1 mark <br> Limited application to the judgement shown in the conclusion <br> case. At least one <br> example of reference to, <br> or use of, the case. | 1-4 marks <br> Advantages and/or disadvantages listed. |

4 (a) Identify and explain two benefits to KSS of creating a brand image for its new football boot.

## Content:

- To make the product well known
- To differentiate the product from its competitors
- To encourage brand loyalty
- Can charge a higher price
- Increase sales.

1 knowledge mark + up to 2 explanation marks +1 application mark for each reason (4 marks $\times 2$ benefits).

For example:
To make the football boots well known. (1 knowledge mark) The football boots will be easily recognised by other people and this will make them want to buy the boot (1) if famous football players wear the boot then sales will increase and so will profits. (1)

Application: The application mark could be achieved as the answer refers to famous football players. (1 application mark)

Possible application marks:
Football boots/boots; grew slowly; competitive market; small market share; helps footballers to kick the ball more accurately; expand production; sell all over the world; football players; reference to figures in Appendix 1 or 3.

There may be other examples in context which have not been included here.

| Page 9 | Mark Scheme: Teachers' version | Syllabus | Paper |
| :---: | :---: | :---: | :---: |
|  | IGCSE - May/June 2012 | 0450 | 21 |

(b) Emmanuel needs to decide a pricing strategy for the new football boot. Consider price skimming, cost-plus pricing and competitive pricing. Which do you think is the best pricing strategy for Emmanuel to use? Justify your answer using information in Appendix 3.

## Content:

Price skimming

- set a high price
- higher than $\$ 50$
- establishes high quality product
- may put off some customers.


## Cost-plus pricing

- average cost calculated and then a percentage is added on for profit
- $\$ 15$ direct costs plus $\$ 4$ indirect costs $=\$ 19$ per boot plus profit
- easy to apply this method
- competitors' price may be lower.


## Competitive pricing

- set pricing around the same price as competitors' prices
- competitors charge $\$ 40-\$ 50$ per pair and so Emmanuel should charge about $\$ 45$ per pair of boots
- sales possibly higher, research costs to check on competitors' process.

Level 1 e.g. Cost-plus pricing is where the cost is calculated and then a profit is added to determine the price to charge customers.

Level 2 e.g. Cost-plus pricing is where the cost is calculated and then a profit is added to determine the price to charge customers. If they calculate the cost per boot at $\$ 19$ and so a profit can be added (L2). This is a simple way to work out the price of the boot but it may not result in higher profits being earned if it doesn't look at competitors prices (L2). 6 marks for level 2 answer.

Level 3 Detailed discussion of at least three level 2 answers. There will be a conclusion at the end which justifies which pricing strategy would be the most effective and why.

Possible application marks:
\$50; \$19; \$40-50; Football boots/boots; manufacturing sports shoes; competitive market; small market share; patent; multinational sports company; expand production; sell all over the world; football players.

There may be other examples in context which have not been included here.

| Page 10 | Mark Scheme: Teachers' version | Syllabus | Paper |
| :---: | :---: | :---: | :---: |
|  | IGCSE - May/June 2012 | 0450 | 21 |


|  | Application | Knowledge/Analysis/Evaluation |
| :---: | :--- | :--- |
| Level 3 |  | $\begin{array}{l}\text { 9-10 marks } \\ \text { Must have three } \times \text { Level 2 + reference to } \\ \text { figures in Appendix 3-Good judgement } \\ \text { shown as to the best pricing strategy to } \\ \text { use and why not the other strategies } \\ \text { (comparison made). }\end{array}$ |
| Level 2 | $\begin{array}{l}\text { 2 marks } \\ \text { Well applied to case. At least two } \\ \text { examples of reference to, or use } \\ \text { of, the case. }\end{array}$ | $\begin{array}{l}\text { 5-8 marks } \\ \text { Good discussion of the advantages or } \\ \text { disadvantages of pricing strategies OR } \\ \text { balanced argument (even if listed). }\end{array}$ |
| Level 1 | $\begin{array}{l}\text { 1 mark } \\ \text { Limited application to the case. At } \\ \text { least one example of reference to, } \\ \text { or use of, the case. }\end{array}$ | $\begin{array}{l}\text { Price suggested and justified using the } \\ \text { information in Appendix 3. }\end{array}$ |
|  | $\begin{array}{l}\text { 1-4 marks } \\ \text { Definition of pricing strategy. } \\ \text { Simple statements made on the } \\ \text { advantage or disadvantage of each judgement in } \\ \text { pricing strategy. Suitable prices } \\ \text { suggested but not justified. }\end{array}$ |  |
| recommendation shown about which |  |  |
| method should be used (may not have |  |  |
| made reference to figures in appendix 3). |  |  |$\}$


| Page 11 | Mark Scheme: Teachers' version | Syllabus | Paper |
| :---: | :---: | :---: | :---: |
|  | IGCSE - May/June 2012 | 0450 | 21 |

5 (a) The new football boot will be exported to many different countries. Identify and explain four possible problems KSS may have when exporting the new football boot.

## Content:

- Exchange rate changes
- Import restrictions
- Increased risk of non-payment
- Customs different
- Increased transport costs
- Language barriers
- Marketing costs.

1 mark for each problem identified (4 marks max). Plus 1 further mark available for explaining why each is a problem.

1 knowledge mark +1 explanation mark ( 2 marks $\times 4$ problems).
For example:
There might be import restrictions (1 knowledge mark) and this will add to the price the product sells for and may lead to lower demand for the product. (1 explanation mark)
(b) Emmanuel has already chosen Option 1. Was it the right decision to choose Option 1 rather than Option 2? Justify your answer by considering the advantages and disadvantages of each option.

## Content:

| Option 1 <br> Advantages | Disadvantages | Option 2 <br> Advantages | Disadvantages |
| :--- | :--- | :--- | :--- |
| Gain all the profits | Large capital outlay | Don't have <br> advertising expenses | Doesn't gain all the <br> profits |
| Control over <br> production | Large advertising <br> expenses | Percentage of profits <br> received | Loses control of the <br> product |
|  | No existing links <br> with retail outlets | No large capital <br> outlay |  |

Level 1 e.g. Option 2 does not require a large capital outlay. 1 mark for each statement.
Level 2 e.g. Option 2 does not require a large capital outlay. This means the owners do not have to raise $\$ 10 \mathrm{~m}$ which is a large sum as they only have $\$ 1 \mathrm{~m}$ invested at the present time. They would not need to sell more shares which could mean they would lose control of the business. 5 marks for level 2 answer plus 1 application mark for mentioning $\$ 1 \mathrm{~m}$ share capital.

Level 3 Detailed discussion of at least three level 2 answers. There will be a conclusion at the end which justifies which option to choose and why.

| Page 12 | Mark Scheme: Teachers' version | Syllabus | Paper |
| :---: | :---: | :---: | :---: |
|  | IGCSE - May/June 2012 | 0450 | 21 |

Possible application marks: Football boots/boots; set up 10 years ago; manufacturing sports shoes; grew slowly; competitive market; small market share; helps footballers to kick the ball more accurately; patent; multinational sports company; expand production; employ new workers and managers; no links with agents or retail businesses abroad; 10\% of sales revenue; sell all over the world; labour intensive/capital intensive; football players; $\$ 1 \mathrm{~m}$ share capital; reference to figures in Appendix 1 or 3 and also Option 1 and 2.

There may be other examples in context which have not been included here.

|  | Application | Knowledge/Analysis/Evaluation |
| :---: | :--- | :--- |
| Level 3 |  | 9-10 marks <br> Three $\times$ Level 2 + Good judgement <br> shown as to which option to choose and <br> why not other options (comparison <br> made). |
| Level 2 | 2 marks <br> Well applied to case. At least two <br> examples of reference to, or use <br> of, the case. | $5-8$ marks <br> Good discussion of the advantages <br> and/or disadvantages of each option OR <br> balanced argument. <br> Some limited judgement shown about <br> which option to choose. |
| Level 1 | 1 mark <br> Limited application to the case. At <br> least one example of reference to, <br> or use of, the case. | 1-4 marks <br> Advantages or disadvantages of each <br> option stated. |

