



**Cambridge International Examinations**  
Cambridge International General Certificate of Secondary Education

---

**BUSINESS STUDIES**

**0450/21**

Paper 2 Case Study

**May/June 2016**

MARK SCHEME

Maximum Mark: 80

---

**Published**

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 should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

Cambridge will not enter into discussions about these mark schemes.

Cambridge is publishing the mark schemes for the May/June 2016 series for most Cambridge IGCSE<sup>®</sup>, Cambridge International A and AS Level components and some Cambridge O Level components.

© IGCSE is the registered trademark of Cambridge International Examinations.

This syllabus is approved for use in England, Wales and Northern Ireland as a Cambridge International Level 1/Level 2 Certificate.

---

This document consists of **10** printed pages.

© UCLES 2016



**[Turn over**

Page 2	Mark Scheme	Syllabus	Paper
	Cambridge IGCSE – May/June 2016	0450	21

1 (a) Identify and explain one advantage and one disadvantage to Rosa and Eduardo of forming a business partnership. [8]

Knowledge	[2 × 1]	award one mark for each relevant advantage/disadvantage
Analysis	[2 × 1]	award one mark for a relevant explanation of each advantage/disadvantage
Application	[2 × 2]	award two application marks for each advantage/disadvantage

Award one mark for each relevant advantage/disadvantage (maximum of two), such as:

- Increased capital
- Additional partners to work in the business/help with decisions/holidays/responsibility shared
- Additional specialisms/skills of partners
- More ideas.
- Unlimited liability
- No continuity
- Responsible for actions of other partners
- Disagreements may cause problems/arguments
- Slower decision making
- Profit will have to be shared.

Award a maximum of three additional marks for each explanation – 2 of which must be applied to this context – of the advantage/disadvantage.

Indicative response:

Increased capital to put into the business [k] because Rosa and Eduardo will each invest \$50 000 each [ap]. This will reduce the need to borrow money, saving interest payments, [an] when the business expands and moves to larger premises [ap].

Possible application marks: qualified dentists; business set-up 10 years ago in country X; \$50 000 each partner; largest dentist clinics in the country; 1 general manager for the clinic; bank loan to pay for new computer system; reputation for high quality treatments; private patients; 3 months to pay for treatment; move to larger premises; offer teeth whitening; job vacancies for dentists and assistants; information from Appendix 1 and 2.

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

(b) Consider an objective of each of the following three stakeholder groups of DDC. Do you think there will be conflict between the objectives of each of these stakeholder groups? Justify your answer. [12]

Relevant points might include:

- Owner – invested own savings; make profit; expand to gain economies of scale; provide a high quality service
- Patients – good treatment; affordable prices
- Employees – high wages; secure job; good working conditions.

<b>Page 3</b>	<b>Mark Scheme</b>	<b>Syllabus</b>	<b>Paper</b>
	<b>Cambridge IGCSE – May/June 2016</b>	<b>0450</b>	<b>21</b>

Knowledge/Analysis/Evaluation – award up to ten marks using the levels-based mark scheme below.

	Knowledge/Analysis/Evaluation
Level 3	At least 2 × Level 2 + 7–10 marks Well justified conclusion as to whether there will be conflict between the different stakeholder groups.
Level 2	4–6 marks Detailed discussion of the objective of each stakeholder group.
Level 1	1–3 marks Stakeholder group objective outlined.

Level 1 One mark for each L1 statement (max of three marks) e.g. Employees want their jobs to be secure.

Level 2 One L2 explanation can gain four marks and a further mark can be awarded for each additional L2 explanation (max six marks) e.g. Employees will want their jobs to be secure so they will keep receiving a wage for working in the dentist clinic. If the business is successful then they are likely to keep their jobs but if not then they will be made redundant and will receive no wage at all. (Four marks for L2 answer + one application mark for answering in the context of the dental clinic.)

Level 3 For L3 to be awarded there needs to be at least two L2 marks awarded and then a conclusion which justifies whether conflict between the different stakeholder groups is likely to occur.

Award up to two additional marks for relevant application.

Possible application marks: qualified dentists; business set-up 10 years ago in country X; \$50 000 each partner; largest dentist clinics in the country; pay high prices; employs 8 dentists, 10 assistants, 3 receptionists, 1 general manager for the clinic; new computer system requires fewer receptionists; reputation for high quality treatments; private patients; 3 months to pay for treatment; move to larger premises; offer teeth whitening; increasing number of Government-owned dentist clinics; job vacancies for dentists and assistants; information from Appendix 1 and 2.

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

Page 4	Mark Scheme	Syllabus	Paper
	Cambridge IGCSE – May/June 2016	0450	21

2 (a) Identify and explain two methods of training employees to use the new computer system. [8]

Knowledge [2 × 1] award one mark for each relevant method  
 Analysis [2 × 1] award one mark for a relevant explanation for each method  
 Application [2 × 2] award two application marks for each method

Award one mark for each relevant method (maximum of two):

- On-the-job
- Off-the-job
- Examples could be used e.g. training course.

Award a maximum of three additional marks for each explanation or development – two of which must be applied to this context – of the methods.

Indicative response:

Off-the-job training [k] because Rosa and Eduardo will want the receptionists to be trained to a high standard in how to use the new computer system in the dental clinic [ap]. This will mean they are trained by experts in using the new system and so they should be better trained and be more efficient [an]. However, they will be away from the clinic and it may mean that they cannot book-in patients to see the dentist and this might cause annoyance with the patients leading them to go elsewhere to get their teeth treated [ap].

Possible application marks: qualified dentists; \$50 000 each partner; largest dentist clinics in the country; reception; receptionists; 1 general manager for the clinic; bank loan to pay for new computer system; reputation for high quality treatments; private patients; move to larger premises; job vacancies for dentists and assistants; information from Appendix 1 and 2.

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

(b) Consider the information about each of the three receptionists outlined in Appendix 2. Recommend which receptionist should be made redundant. Justify your answer. [12]

Relevant points might include:

Receptionist 1 (age 50)	Experienced in the ways of DDC – knows what to do Relevant qualifications Been there from the start Works well with clients
Receptionist 2 (age 30)	Not worked at DDC for long Not qualified Experienced as a dental receptionist
Receptionist 3 (age 25)	Some experience of working practices at DDC Knows about computers Not qualified Limited experience

<b>Page 5</b>	<b>Mark Scheme</b>	<b>Syllabus</b>	<b>Paper</b>
	<b>Cambridge IGCSE – May/June 2016</b>	<b>0450</b>	<b>21</b>

Knowledge/Analysis/Evaluation – award up to ten marks using the levels-based mark scheme below.

	Knowledge/Analysis/Evaluation
Level 3	At least 2 × Level 2 + 9–10 marks for well justified recommendation as to which receptionist to make redundant rather than the other receptionists.  7–8 marks for some limited judgement shown in recommendation as to which receptionist to make redundant.
Level 2	4–6 marks Detailed discussion of advantages and/or disadvantages of each receptionist.
Level 1	1–3 marks Outline the advantage and/or disadvantage of each receptionist.

Level 1 One mark for each L1 statement (max of three marks) e.g. Receptionist 1 has worked for DDC for a long time and will be used to their working practices.

Level 2 Four marks for the first L2 answer and then one extra mark for each additional L2 answer up to maximum of six marks. E.g. Receptionist 1 has worked for DDC for a long time and will be used to their working practices which will mean that they will know how the dental clinic works and the dentist will be able to delegate tasks to them more easily. (Four marks for L2 answer + one application mark for answering using reference to patients and dental clinics.)

Level 3 For L3 to be awarded there needs to be at least two L2 marks awarded and then a recommendation which justifies which receptionist to make redundant.

Award up to two additional marks for relevant application.

Possible application marks: information from Appendix 2....  
age 50, age 30, age 25, 10 years at DCC, 1 year at DCC, 4 years at DCC,  
receptionist qualifications, no qualifications, lots of experience as a receptionist for other dentists, only experience as a receptionist for DDC, charity work, plays football, repairs computers at home.

Page 6	Mark Scheme	Syllabus	Paper
	Cambridge IGCSE – May/June 2016	0450	21

- 3 (a) The Government is expanding the public sector provision of health care including dentist clinics (see Appendix 1). Identify and explain two external benefits to the rest of society of this increased provision of health care for poor families. [8]

Knowledge [2 × 1] award one mark for each relevant third party external benefit  
 Analysis [2 × 1] award one mark for a relevant explanation of third party external benefit  
 Application [2 × 2] award two application marks for each external benefit

Award one mark for each relevant external benefit (maximum of two), such as:

- Jobs will be created/reduced unemployment
- Businesses will lose fewer days off from employees/increased productivity
- Children will have better dental health and therefore cost their parents less money in dental treatment, thereby increasing spending on other products.

Third party groups who are most likely to benefit from the increase in public sector dental clinics:

- High income families/private patients
- Others businesses – employers
- Other businesses – dental suppliers
- Households – tax revenue increases so more public spending.

Do not reward poor families or government free dental clinics as third party groups.

Award a maximum of three additional marks for each explanation – 2 of which must be applied to this context – of the benefits.

Indicative response:

Jobs will be created [k] because more dentists will need to be employed at the clinics [ap]. Government-owned dental clinics will lead to lower levels of unemployment and this will increase spending for other businesses [an]. This will also be true for receptionists as well as practice managers and dental assistants who will also find it easier to get a job [ap].

Possible application marks: less illness; qualified dentists; private patients; Government-owned dentist clinics; free treatment in Government dentist clinics for poor families; increasing number of Government-owned dentist clinics; job vacancies for dentists and assistants; country x.

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

- (b) Refer to the cash flow forecast in Appendix 3.

(i) Calculate values for:

[4]

W \$ 560 000  
 X \$1 000 000  
 Y \$ 960 000  
 Z \$ 160 000

(Format of the forecast boxes means that 000 or \$ are not essential.)

Page 7	Mark Scheme	Syllabus	Paper
	Cambridge IGCSE – May/June 2016	0450	21

- (ii) Consider **two** ways the cash flow could be improved. Recommend the best way for Rosa and Eduardo to improve the cash flow in the second half of 2016. Justify your answer. [8]

Relevant points might include:

Example to increase the cash inflows (1) – e.g. increase number of patients; increase sales revenue; reduce time for payment by patients; bank loan would provide a cash injection.

Example to reduce the cash outflows (1) – e.g. reduce overheads; obtain trade credit/delay payment to creditors; reduce rent; reduce wages/lay-off workers.

The answer should not refer to profit or loss – the focus is purely cash flow.

Solutions should be realistic for a six-month period i.e. not long-term solutions.

Level 1 One mark for each statement e.g. Increase sales revenue (one mark).

Level 2 Four marks for the first L2 answer and then one extra mark for each additional L2 answer up to a maximum of six marks.

E.g. The amount of cash flow at the end of each month after.

September is decreasing because the sales revenue is decreasing and so the business needs to find ways to increase the sales revenue in these months (L2). However, if it increases advertising to try to encourage more patients to go to the clinic then it may increase the cash outflows from advertising expenditure as well as inventory and so inflows will need to be greater than outflows for the cash flow to improve (L2).

Five marks for good L2 answer.

Level 3 For L3 to be awarded there needs to be at least two L2 marks awarded and then a recommendation which justifies which is the best way to choose.

Knowledge/Analysis/Evaluation – award up to eight marks using the levels-based mark scheme below.

	Knowledge/Analysis/Evaluation
Level 3	7–8 marks Well justified recommendation as which is the best way to choose.
Level 2	4–6 marks Detailed discussion of advantage/disadvantage of each suitable way to improve the cash flow.
Level 1	1–3 marks Outline of advantage/disadvantage of each suitable way to improve the cash flow.

Page 8	Mark Scheme	Syllabus	Paper
	Cambridge IGCSE – May/June 2016	0450	21

4 (a) Identify and explain four factors Rosa and Eduardo should consider when choosing larger premises [8]

Application [4 × 1] award one application mark for each factor (maximum of 4)  
 Analysis [4 × 1] award one mark for an explanation of each factor (maximum of 4)

Award one mark for each relevant factor (maximum of four), such as:

- Size of premises available
- Cost of premises
- Condition of the buildings
- Car parking available for patients
- Security of the area
- Access by public transport
- Easy access by roads
- Close to existing patients
- Retention of existing dentists/employees
- Other dental clinics in the area
- Nature of the surrounding businesses.

Do not reward good access for suppliers and wage levels of workers in the area.

Award a maximum of one additional mark for each explanation – 2 of which must be applied to this context – of the factor.

Indicative response:

Parking available for patients [ap] because if there is not sufficient parking available for patients to use then they may prefer to go to alternative dental clinics for treatment and DDC may lose these patients [an].

Possible application marks: largest dentist clinics in the country; employs 8 dentists, 10 assistants, 3 receptionists, 1 general manager for the clinic; reputation for high quality treatments; private patients; Government-owned dentist clinics; job vacancies for dentists and assistants; information from Appendix 1 and 2.

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



Page 9	Mark Scheme	Syllabus	Paper
	Cambridge IGCSE – May/June 2016	0450	21

- (b) When DDC has moved to new premises, Rosa and Eduardo plan to use promotional methods to attract more patients. Consider each of the following promotional methods. Recommend which one you think they should choose. Justify your answer. [12]

Relevant points might include:

Advertising on a website	<ul style="list-style-type: none"> <li>Cheap form of advertising</li> <li>May/may not be seen by many people</li> </ul>
National newspaper	<ul style="list-style-type: none"> <li>Expensive</li> <li>Target population may not read newspapers</li> <li>Reaches a large number of people</li> </ul>
Money-off coupons	<ul style="list-style-type: none"> <li>Negative publicity – if associated with poor quality treatment</li> <li>Encourages people to try the dental clinic</li> </ul>

Knowledge/Analysis/Evaluation – award up to ten marks using the levels-based mark scheme below.

	Knowledge/Analysis/Evaluation
Level 3	At least 2 × Level 2 + 9–10 marks for well justified recommendation as to the best method of promotion to use rather than the alternatives.  7–8 marks for some limited judgement shown in recommendation as to the best method of promotion to use.
Level 2	4–6 marks Detailed discussion of the advantages and/or disadvantages of each method.
Level 1	1–3 marks Outline of the advantages and/or disadvantages of each method.

Level 1 One mark for each L1 statement (max of 3 marks) e.g. Advertising on a website is a relatively cheap form of advertising.

Level 2 Four marks for the first L2 answer and then one extra mark for each additional L2 answer up to maximum of six marks. E.g. Advertising on a website is a relatively cheap form of advertising but it may be expensive to set-up in the first place if Rosa or Eduardo do not know how to do this. Also maintenance will be required to keep the website up-to-date. The website can show examples of dental treatment which shows white perfect teeth. This will encourage people to become patients at the clinic so they can benefit from the treatments shown on the website. (Four marks for L2 answer + 1 application mark for including reference to teeth whitening and dental treatment.)

Level 3 For L3 to be awarded there needs to be at least two L2 marks awarded and then a recommendation which justifies which is the best method to choose.

<b>Page 10</b>	<b>Mark Scheme</b>	<b>Syllabus</b>	<b>Paper</b>
	<b>Cambridge IGCSE – May/June 2016</b>	<b>0450</b>	<b>21</b>

Award up to two additional marks for relevant application.

Possible application marks: qualified dentists; business set-up 10 years ago in country X; largest dentist clinics in the country; employs 8 dentists; reputation for high quality treatments; private patients; 3 months to pay for treatment; offer teeth whitening; increasing number of Government-owned dentist clinics; information from Appendix 1 and 2.

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