

Cambridge International A Level

Paper 2 Practical Test

MARK SCHEME

Maximum Mark: 100

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 International will not enter into discussions about these mark schemes.

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Cambridge International A Level – Mark Scheme

PUBLISHED

Generic Marking Principles

These general marking principles must be applied by all examiners when marking candidate answers. They should be applied alongside the specific content of the mark scheme or generic level descriptors for a question. Each question paper and mark scheme will also comply with these marking principles.

GENERIC MARKING PRINCIPLE 1:

Marks must be awarded in line with:

- the specific content of the mark scheme or the generic level descriptors for the question
- the specific skills defined in the mark scheme or in the generic level descriptors for the question
- the standard of response required by a candidate as exemplified by the standardisation scripts.

GENERIC MARKING PRINCIPLE 2:

Marks awarded are always whole marks (not half marks, or other fractions).

GENERIC MARKING PRINCIPLE 3:

Marks must be awarded **positively**:

- marks are awarded for correct/valid answers, as defined in the mark scheme. However, credit is given for valid answers which go beyond the scope of the syllabus and mark scheme, referring to your Team Leader as appropriate
- marks are awarded when candidates clearly demonstrate what they know and can do
- marks are not deducted for errors
- marks are not deducted for omissions
- answers should only be judged on the quality of spelling, punctuation and grammar when these features are specifically assessed by the question as indicated by the mark scheme. The meaning, however, should be unambiguous.

GENERIC MARKING PRINCIPLE 4:

Rules must be applied consistently, e.g. in situations where candidates have not followed instructions or in the application of generic level descriptors.

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GENERIC MARKING PRINCIPLE 5:

Marks should be awarded using the full range of marks defined in the mark scheme for the question (however; the use of the full mark range may be limited according to the quality of the candidate responses seen).

GENERIC MARKING PRINCIPLE 6:

Marks awarded are based solely on the requirements as defined in the mark scheme. Marks should not be awarded with grade thresholds or grade descriptors in mind.

Science-Specific Marking Principles

- 1 Examiners should consider the context and scientific use of any keywords when awarding marks. Although keywords may be present, marks should not be awarded if the keywords are used incorrectly.
- 2 The examiner should not choose between contradictory statements given in the same question part, and credit should not be awarded for any correct statement that is contradicted within the same question part. Wrong science that is irrelevant to the question should be ignored.
- Although spellings do not have to be correct, spellings of syllabus terms must allow for clear and unambiguous separation from other syllabus terms with which they may be confused (e.g. ethane / ethene, glucagon / glycogen, refraction / reflection).
- The error carried forward (ecf) principle should be applied, where appropriate. If an incorrect answer is subsequently used in a scientifically correct way, the candidate should be awarded these subsequent marking points. Further guidance will be included in the mark scheme where necessary and any exceptions to this general principle will be noted.

5 <u>'List rule' guidance</u>

For questions that require *n* responses (e.g. State **two** reasons ...):

- The response should be read as continuous prose, even when numbered answer spaces are provided.
- Any response marked *ignore* in the mark scheme should not count towards *n*.
- Incorrect responses should not be awarded credit but will still count towards n.
- Read the entire response to check for any responses that contradict those that would otherwise be credited. Credit should **not** be awarded for any responses that are contradicted within the rest of the response. Where two responses contradict one another, this should be treated as a single incorrect response.
- Non-contradictory responses after the first *n* responses may be ignored even if they include incorrect science.

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6 Calculation specific guidance

Correct answers to calculations should be given full credit even if there is no working or incorrect working, **unless** the question states 'show your working'.

For questions in which the number of significant figures required is not stated, credit should be awarded for correct answers when rounded by the examiner to the number of significant figures given in the mark scheme. This may not apply to measured values.

For answers given in standard form (e.g. $a \times 10^n$) in which the convention of restricting the value of the coefficient (a) to a value between 1 and 10 is not followed, credit may still be awarded if the answer can be converted to the answer given in the mark scheme.

Unless a separate mark is given for a unit, a missing or incorrect unit will normally mean that the final calculation mark is not awarded. Exceptions to this general principle will be noted in the mark scheme.

7 Guidance for chemical equations

Multiples / fractions of coefficients used in chemical equations are acceptable unless stated otherwise in the mark scheme.

State symbols given in an equation should be ignored unless asked for in the question or stated otherwise in the mark scheme.

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Question	Answer	Marks
Section A		•
1(a)(i)	Dishes chosen – four dishes – suitability	4
1(a)(ii)	Variety of skills chosen without repetition	4
1(b)(i)	Choice of dish to show the dextrinisation of starch	1
1(b)(ii)	Degree of skill for dish chosen in (b)	1
	Time Plan	
	Sequence	5
	Methods	5
	Cooking temperature and cooking times	5
	Shopping list	1
1(c)(i)	List five disadvantages of packaging foods.	5
	contributes to landfill / creates waste / more pollution; food may sweat / does not breathe / may ruin natural appearance; additional cost to product; unable to see contents / may hide decay or decomposition; some materials can be easily damaged e.g. paper, glass; damaging to animals; bulky packaging may take up space; may be hard to open; tins may rust and spoil food; may have to buy more than you need; may make product heavy to carry e.g. glass; may be misleading for the consumer i.e. package is a lot bigger than the product; AVP;	

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Question	Answer	Marks
1(c)(ii)	List five advantages of using ready-made pastry.	5
	saves time shopping for different ingredients; saves time / effort for busy people; saves time in making / less equipment / less washing up; useful for people who do not have the necessary skills / easy to use; consistent results / less chance of going wrong; may be cheaper than buying all the different ingredients; can be stored for emergencies as frozen / packet mix; nutritional information on the packaging; different varieties for the family;	
1(c)(iii)	Practical reasons for choice	4
	Include skills used – use of seasonal foods – ease of obtaining foods – e.g. named ingredient grown in garden / in season – oven management – cost – serving	
1(c)(iv)	Nutritional value of dish chosen in (b)	4
	Must give four nutrients and appropriate functions	
Section B		
	Manipulative skill and method of working (Marked at the Centre)	26
Section C		
	Results and serving (Marked at the Centre)	30

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Question	Answer	Marks
Section A		
2(a)(i)	Dishes chosen – four dishes – suitability	4
2(a)(ii)	Variety of skills chosen without repetition	4
2(b)(i)	Choice of dish to show the dextrinisation of starch	1
2(b)(ii)	Degree of skill for dish chosen in (b)	1
	Time Plan	
	Sequence	5
	Methods	5
	Cooking temperature and cooking times	5
	Shopping list	1
2(c)(i)	List four points to explain how infra-red rays heat food by radiation.	4
	heat energy passes from one point to another without the aid of a medium; radiation passes through a space or vacuum; infra-red rays pass from the heat source in straight lines; falling on any object in their path; heat is absorbed by the food;	

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Question	Answer	Marks
2(c)(ii)	List six advantages of using a microwave oven.	6
	microwaves cannot be emitted once the door is open / safe to use; oven turns off automatically after set time; uses normal electric sockets; small so suitable for small kitchens; may have different power outputs i.e. defrosting and reheating; quick / saves time as food is cooked quickly; saves money as less power / energy is used as food is cooked quicker; less destruction of water soluble vitamins as food cooks quickly / little or no water is used; vegetables keep their colour / flavour due to short cooking time; portable; food can be served in the same dish / saves washing up; can use glass / china / ceramics / paper / plastic; easy to clean; uses no fat so healthier;	
2(c)(iii)	Practical reasons for choice	4
	Include skills used – use of seasonal foods – ease of obtaining foods – e.g. named ingredient grown in garden / in season – oven management – cost – serving	
2(c)(iv)	Nutritional value of dish chosen in (b)	4
	Must give four nutrients and appropriate functions	
Section B		
	Manipulative skill and method of working (Marked at the Centre)	26
Section C		
	Results and serving (Marked at the Centre)	30

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Question	Answer	Marks
Section A		
3(a)(i)	Dishes chosen – four dishes – suitability	4
3(a)(ii)	Variety of skills chosen without repetition	4
3(b)(i)	Choice of dish to show the dextrinisation of starch	1
3(b)(ii)	Degree of skill for dish chosen in (b)	1
	Time Plan	
	Sequence	5
	Methods	5
	Cooking temperature and cooking times	5
	Shopping list	1
3(c)(i)	List four points to describe the chemical structure of lactose.	4
	disaccharide; chemical formula C ₁₂ H ₂₂ O ₁₁ ; made up of 2 monosaccharides; 1 unit of galactose and 1 unit of glucose; it is a reducing sugar;	

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Question	Answer	Marks
3(c)(ii)	List six points to describe the effects of cooking on milk.	6
	water evaporates from the milk;	
	lactose sugars caramelise;	
	milk turns a pale cream colour; lactose is broken down into glucose and galactose / monosaccharides;	
	sweeter flavour is produced;	
	proteins lactalbumin and lactoglobulin coagulate;	
	forming a skin on the surface;	
	reduced bacteria ;	
	reduced vitamin B ₂ / riboflavin content;	
3(c)(iii)	Practical reasons for choice	4
	Include skills used – use of seasonal foods – ease of obtaining foods – e.g. named ingredient grown in garden / in season – oven management – cost – serving	
3(c)(iv)	Nutritional value of dish chosen in (b)	4
	Must give four nutrients and appropriate functions	
Section B		
	Manipulative skill and method of working	26
	(Marked at the Centre)	
Section C		
	Results and serving	30
	(Marked at the Centre)	

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