

Cambridge International AS Level

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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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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.

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Question	Answer	Marks
1(a)	Considering the advantages and <u>one</u> disadvantage, explain why the Oakwood High School committee would be most likely to choose the musical performances.	10
	You must <u>not</u> refer to the other options.	
	Answer in continuous prose.	
	The performances have most flexibility, with the option to stage a third show (with minimal additional effort) should demand suffice. This could improve their likely profitability. (Music teacher) Miss Brandon is clearly very keen on the idea of a show, and especially likes musicals. She is very willing to put in the necessary time (for auditions, rehearsals etc.) Her vision is for a musical event of a high standard and there appears to be a precedent of staging high-quality performances at the school. This is supported by the high standard of the school orchestra, which recently won a regional competition and which would presumably be closely involved in the event. She also refutes Mr James' claim of exclusivity/claims that many more students than just the performers (singers, musicians, dancers and actors) can be involved for example those designing posters/ selling tickets and programmes/working backstage/organising costumes and/or selling refreshments.	
	This could potentially match the head teacher's desire for the event to include as many students as possible. The capacity of the school hall suggests that, if all tickets were sold (for two or three performances), the event could be (very) profitable. Miss Brandon is convinced the performances will make the most money (but she is not impartial). The actor parent could perhaps be persuaded to be the 'guest of honour' for a gala performance, generating more interest and potentially increasing ticket sales/justifying a higher price for tickets for that evening. Holding shows on weekday evenings, after the school day, causes least disruption. BUT (Mr James is of the view that) the performance would take the most work to organise, with the auditions and rehearsals, taking up staff time and commitment, including after school and at weekends. (According to Mr James) the performance is least likely to involve the whole school, as it will primarily involve those with most talent for music, dancing or acting, while inclusivity is something the head teacher hopes the event will achieve. The school choir is not as strong as it was (since some of its best singers left for university last year). This may threaten the quality of any performance. The most recent major performance was only last year, and the school usually stages such events in alternate years, which could affect ticket sales negatively, as people may not be keen to attend another show so soon.	

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Question			Answer	Mark
1(a)	The commits school/at we and Ms Foo therefore mo capable.) The minibus fund-raising Credit any on In assessing	tee is intended bekends) leaves as sost probably is not all the goal. (Could ther valid pour the answer	ake place after long days at school so participants might be tired (next day/and not perform well). ed to coordinate/organise the event. Mr James does not seem very keen to put the work in (after oon as lessons are over at the end of the school day (to walk her dogs) leaving much of the work to Miss Brandon. (Can be argued in reverse, as she is so keen and at likely to be used in connection with music, so there is no obvious link between the event and the dibe argued in reverse.) bint. Take a coherent appraisal, clearly expressed, of four or more relevant considerations, make use of analytical skills.	
	Levels	Mark(s)	Descriptors	
	4	9–10	 Capacity to interpret evidence and sustained ability to present relevant arguments, analysis and exemplification maintaining a strong focus on the main issues in the question. Comprehensive approach demonstrating ability to identify and select relevant information, data, concepts and opinions and maintain a strong focus on the key issues. Shows the ability to communicate clearly and accurately in a fluent and organised manner. 	
	3	6–8	 Moderate range of arguments, analysis and exemplification covering some of the main issues in the question. Demonstrating some grasp of the nature of key issues but with a restricted range or a loss of focus leading to the inclusion of some irrelevant material. Shows the ability to communicate clearly and accurately in a fluent and organised manner. 	
	2	3–5	 Limited analysis shown in a response consisting of mainly undeveloped material. A modest range of selected points, perhaps some of which are irrelevant or incorrect. Ability to convey meaning but with limited powers of expression with some errors in spelling, punctuation or grammar which impede the flow and hinder communication. 	
	1	1–2	 Some simple, mainly unexplained or undeveloped points or perhaps a very narrow range – with little interpretation or analysis and little development or exemplification. Limited range, dubious choice showing restricted appreciation of key issues. Ability to convey meaning but with limited powers of expression with some errors in spelling, punctuation or grammar which impede the flow and hinder communication. 	
	0	0	A mark of zero should be awarded for no creditable content.	

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Question	Answer	Marks
1(b)(i)	Explain two disadvantages of choosing the sponsored walk.	4
	You should <u>not</u> refer to the other events.	
	Making the walk compulsory for all the students (1) risks losing the fun element of a fund-raising event (1). Holding the walk on a school day (1) takes children out of the classroom/reduces learning time (1). Collecting the (pledged) money took a long time/was difficult on the <u>last occasion</u> a sponsored event was held (1) so this may be a problem <u>again/this time</u> (1). It required/may require endless nagging/reminder letters to parents (from the committee) (1)/the teachers on the committee won't want to do it. Oakwood High School is in an urban area (1) so plotting (and/or patrolling) a safe/pleasant 3km route may be difficult (1). Credit any other valid point. 2 × 2	
1(b)(ii)	Explain two disadvantages of choosing the fair.	4
	You should <u>not</u> refer to the other events.	
	Holding the fair on a weekend afternoon demands a time commitment (from students, teachers and parents) (1) outside the normal school day/times (1). Mr James, especially, may not be keen to help. (1) Max. 2) Selling cakes, biscuits and sweets (on a main/popular stall) (1) contravenes the school's healthy eating policy/contradicts the message sent by the (healthy eating) policy now in place in the school canteen (1). It might not be as easy (as Ms Foo thinks) to get sufficient/quality donations of things to sell on the stalls (1) or to involve local businesses in the venture/to donate prizes (1). It is not guaranteed to make very much money/did not make much money last time (1) so there may not be <u>sufficient</u> profit to fund the minibus (fully) (1). Credit any other valid point. 2×2	
1(c)	State which <u>one</u> piece of the Additional Information provided is the <u>least</u> relevant when the committee is choosing which event to hold.	1
	Point 9. Oakwood High School has just learned that two of its senior chemistry students have won scholarships to prestigious universities.	

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Question	Answer	Marks
1(d)(i)	Referring to the committee meeting extract only, state which of the three teachers is best described as being enthusiastic.	1
	Miss Brandon	
1(d)(ii)	Referring to the committee meeting extract only, state which of the three teachers is best described as being community minded.	1
	Ms Foo	
1(e)	Suggest why Mr James seems to favour the sponsored walk.	2
	He thinks it will be easiest to <u>organise</u> (1) and thus save him/the staff involved time and effort (1). The walk would be held during a school day (1) and he does not seem especially keen to commit to giving up his time in the evenings/at weekends (1). He is sporty (coaches the cricket team) (1) and the walk is active. (Presumably some could even jog or run the course/laps?) (1) He is friends with the head teacher (1) who wants an inclusive event (which this would definitely be) (1). The minibus is mainly to be used by sports teams (1), so there is an obvious link to a physical activity/the sponsored walk (1). Credit any other valid point.	
1(f)	From your own knowledge, suggest how students benefit personally from involvement in school events.	2
	Events such as these promote community cohesion/school pride (1) encourage cooperation and teamwork between students (1) and/or with staff who may not usually work together (1) for example across age groups/of different gender (1) facilitate pooling/demonstrating a range of talents (1) outside the academic curriculum/exam results (where some students may not excel) (1) and develop skills and attributes such as teamwork/leadership/innovation/responsibility/dedication (1). Credit any other valid point.	

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Question	Answer	Marks
2(a)(i)	From the material identify the word or phrase that means:	1
	to change dramatically (lines 1–7)	
	(to) revolutionise	
2(a)(ii)	From the material identify the word or phrase that means:	1
	to introduce (lines 25–28)	
	(to) roll out	
2(a)(iii)	From the material identify the word or phrase that means:	1
	expanding (lines 58–62)	
	burgeoning	
2(b)	<u>Using your own words</u> as far as possible, identify <u>three</u> problems faced by Ghanaian banks, according to Charlette N'Guessan.	3
	Those wishing to commit fraud are becoming better/more sophisticated (1) and there is a lot of internet fraud in Africa/Ghana (1). Banks are devoting huge sums attempting to solve the problem (1) but their measures in place to combat it are ineffective (1).	

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Question	Answer	Marks
2(c)(i)	Explain how Bace API achieves its goal to 'verify identities' (line 18).	2
	Answer in about 20 words.	
	The software uses facial recognition <u>and</u> artificial intelligence. (1) <u>Live images</u> or (short) <u>videos</u> (from phone cameras) (1) are <u>compared</u> with reference photos/official ID documents (1), to <u>detect</u> if it is a real person/images which are of existing pictures/not of people (1) ensuring <u>access</u> is not fake/robotic (1). Any relevant content well over 20 words should be totally disregarded. Examiners should draw a vertical red line at that point.	
2(c)(ii)	Explain how Bace API will allow more students in Ghana to have their own bank account (line 29).	2
	Answer in about 20 words. Many Ghanaian students lack government-issued/official identification documents/passports/ driving licences. (1) They could use their student identification (ID) cards to verify their identities/for bank logins/to open accounts (1). It could create a student database using their university IDs. (1) Any relevant content well over 20 words should be totally disregarded. Examiners should draw a vertical red line at that point.	
2(d)	<u>Using your own words</u> as far as possible, identify the <u>two</u> problems Jack Oyugi's scheme aims to solve (lines 34–41).	2
	The need for less expensive protein-rich food supplies (for animals)/ to make (dairy) farming more profitable. (1)	
	Water hyacinth is a non-native/fast-growing plant/ blocks important dams and waterways/ (is a problem on Lake Victoria where it) blocks fishermen's journeys/ provides another breeding ground for mosquitoes/ which bring dangerous illness (to people). (1)	

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Question	Answer	Marks
2(e)	Identify two pieces of evidence which indicate the success of Oyugi's innovation for Kenyan farmers.	1
	(In the pilot study, Kenyan farmers noted) a 20% increase in milk production <u>and</u> a 30% decrease in <u>feed</u> costs (1).	
2(f)	Explain the benefit to local fishermen of the water hyacinth cake scheme.	2
	Answer in about 20 words.	
	They are employed to	

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Question	Answer	Marks
2(h)(i)	In your opinion, suggest two features which are common to all three business innovations.	2
	A desire to improve the lives of (specific groups of) people in the community/an element of social responsibility (1) an aim to address real/day-to-day issues faced by (ordinary) people (1) creation of employment (1). Credit any other valid point.	
2(h)(ii)	In your opinion, outline the benefits the prize-winning innovator might expect from 'mentoring' (line 4).	2
	Support/advice/guidance/target setting/help in skills development (1) from someone with (much) more business experience (1) at any time when needed (1). (Increased) access to contacts/services/facilities through the mentor. (1) Credit any other valid point.	

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