

Cambridge International AS & A Level

PSYCHOLOGY**9990/12**

Paper 1 Approaches, Issues and Debates

October/November 2025**MARK SCHEME**Maximum Mark: 60

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.

Cambridge International is publishing the mark schemes for the October/November 2025 series for most Cambridge IGCSE, Cambridge International A and AS Level components, and some Cambridge O Level components.

This document consists of **23** printed pages.

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 descriptions 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.

PUBLISHED**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.

PUBLISHED**Social Science-Specific Marking Principles
(for point-based marking)****1 Components using point-based marking:**

- Point marking is often used to reward knowledge, understanding and application of skills. We give credit where the candidate's answer shows relevant knowledge, understanding and application of skills in answering the question. We do not give credit where the answer shows confusion.

From this it follows that we:

- a** DO credit answers which are worded differently from the mark scheme if they clearly convey the same meaning (unless the mark scheme requires a specific term)
- b** DO credit alternative answers/examples which are not written in the mark scheme if they are correct
- c** DO credit answers where candidates give more than one correct answer in one prompt/numbered/scaffolded space where extended writing is required rather than list-type answers. For example, questions that require *n* reasons (e.g. State two reasons ...).
- d** DO NOT credit answers simply for using a 'key term' unless that is all that is required. (Check for evidence it is understood and not used wrongly.)
- e** DO NOT credit answers which are obviously self-contradicting or trying to cover all possibilities
- f** DO NOT give further credit for what is effectively repetition of a correct point already credited unless the language itself is being tested. This applies equally to 'mirror statements' (i.e. polluted/not polluted).
- g** DO NOT require spellings to be correct, unless this is part of the test. However spellings of syllabus terms must allow for clear and unambiguous separation from other syllabus terms with which they may be confused (e.g. Corrasion/Corrosion)

2 Presentation of mark scheme:

- Slashes (/) or the word 'or' separate alternative ways of making the same point.
- Semi colons (;) bullet points (•) or figures in brackets (1) separate different points.
- Content in the answer column in brackets is for examiner information/context to clarify the marking but is not required to earn the mark (except Accounting syllabuses where they indicate negative numbers).

3 Calculation questions:

- The mark scheme will show the steps in the most likely correct method(s), the mark for each step, the correct answer(s) and the mark for each answer
- If working/explanation is considered essential for full credit, this will be indicated in the question paper and in the mark scheme. In all other instances, the correct answer to a calculation should be given full credit, even if no supporting working is shown.
- Where the candidate uses a valid method which is not covered by the mark scheme, award equivalent marks for reaching equivalent stages.
- Where an answer makes use of a candidate's own incorrect figure from previous working, the 'own figure rule' applies: full marks will be given if a correct and complete method is used. Further guidance will be included in the mark scheme where necessary and any exceptions to this general principle will be noted.

4 Annotation:

- For point marking, ticks can be used to indicate correct answers and crosses can be used to indicate wrong answers. There is no direct relationship between ticks and marks. Ticks have no defined meaning for levels of response marking.
- For levels of response marking, the level awarded should be annotated on the script.
- Other annotations will be used by examiners as agreed during standardisation, and the meaning will be understood by all examiners who marked that paper.

Annotations guidance for centres

Examiners use a system of annotations as a shorthand for communicating their marking decisions to one another. Examiners are trained during the standardisation process on how and when to use annotations. The purpose of annotations is to inform the standardisation and monitoring processes and guide the supervising examiners when they are checking the work of examiners within their team. The meaning of annotations and how they are used is specific to each component and is understood by all examiners who mark the component.

We publish annotations in our mark schemes to help centres understand the annotations they may see on copies of scripts. Note that there may not be a direct correlation between the number of annotations on a script and the mark awarded. Similarly, the use of an annotation may not be an indication of the quality of the response.

The annotations listed below were available to examiners marking this component in this series.

Annotations

Annotation	Meaning
	A creditworthy point made by the candidate A creditworthy 'what' for a generic everyday application question
	An incorrect response
	Benefit of Doubt
	Repetition of a point
	Unclear response
	The named issue in the 10-mark essay
    	Levels used for the 10-mark essay (L1–L5) Levels used for the 8-mark similarity/difference question (L1–L4)

Annotation	Meaning
	Not Answering the Question
	The blank page has been seen. An attached response has been seen.
	A creditworthy strength in the 10-mark essay. A creditworthy 'how' for a generic everyday application question
	A creditworthy weakness in the 10-mark essay.
	A creditworthy point in the 10-mark essay that is brief .
	A creditworthy point in the 10-mark essay that is detailed .
	A relevant ethical guideline in Q4 . A creditworthy example in Q7 .

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Question	Answer	Marks	Guidance
1(a)	From the study by Milgram (obedience): State the number of participants who pressed the maximum shock level switch (450 volts). 1 mark for correct number. 26.	1	If more than one response given, take first one only.
1(b)	One example of a sign of tension shown by the participants in this study was nervous laughter. Identify <u>two</u> other signs of tension shown by participants. 1 mark per correct identification. Sweat(ing). Tremble/trembling/shaking/shivering. Stuttering. Biting lip. Groaning. Dig nails into flesh. Smiling. Violent convulsion/seizure.	2	List is definitive. Accept 'verbal comments'/they asked to stop. Do not accept shouting or nervous laughter.

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Question	Answer	Marks	Guidance
1(c)	Before the study, fourteen psychology students from Yale University were told about the procedure of the study. Outline what these students were asked to predict about the study. 1 mark per correct point. They were asked to reflect carefully/predict the behaviour of 100 (hypothetical) people. They had to plot the distribution of obedience based on the characteristics of the sample. They were asked what percentage of participants/how many participants would press the 450-volt switch.	2	List is definitive. Do credit 'asked at which voltage they would stop' for marking point 2. Do credit answers like 'asked to predict if people <u>would harm</u> another to obey authority' etc. for 1 mark. Do not credit any findings of these predictions

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Question	Answer	Marks	Guidance
2(a)	From the study by Bandura et al. (aggression): One conclusion was that boys are more likely to imitate aggressive behaviour than girls. Outline <u>one</u> other conclusion from this study. 2 marks full/detailed conclusion. 1 mark partial/brief conclusion Witnessing an aggressive act is enough to produce aggression in the person who observed it (2 marks). Children will reproduce aggressive behaviours in the absence of an observed model/adult (2 marks) Children are more likely to imitate the aggression of a same sex model (2 marks) Girls are more likely to imitate verbal aggression (1 mark) Children will imitate aggression (1 mark) Boys showed more gun aggression (0 marks: result). There are other creditworthy conclusions.	2	Do not credit the conclusion already presented in the question. No mention of aggression = 1 mark max. For sex differences conclusions based on type of aggression, the only creditworthy response is about girls and verbal aggression for 1 mark max. Comparisons to no-model or non-aggressive model = 1 mark max as part result. Mention of 'group' or 'condition' = 0 marks (result).
2(b)	Outline <u>one</u> weakness of this study in relation to the sample of participants. 1 mark for identifying the weakness related to the sample. 1 mark for outlining the weakness with an example from the study. e.g., Difficult to generalise from the sample (1 mark: identification). The sample was only from one nursery so this could make it difficult to generalise as the sample may not fully represent children in other parts of the world/different nurseries as it was a university nursery (1 mark: outlining). There are other creditworthy sample-related weaknesses.	2	Accept arguments linked to the ethics of using children for 1 mark max. Do not credit 'cannot generalise to adults'. Do award the identification of 'low generalisability' even if the example is incorrect. Accept 'cannot be applied' and 'not representative' as ID marks.

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Question	Answer	Marks	Guidance
3(a)	In the study by Piliavin et al. (subway Samaritans), there were: models victims (acting drunk or acting ill) Identify <u>two</u> features of the models used in this study. 1 mark per correct feature. White. Male. Age 24-29. Wore informal/casual clothes.	2	List is definitive. Ignore reference to the victims. Do credit n=4 Do accept 'boys', 'students' and 'Caucasian' Do not accept 'adults'
3(b)	Outline <u>one</u> result in relation to the victim acting drunk before any model gave help. 2 marks for the result with a meaningful comparison. 1 mark for result with no meaningful comparison. e.g., 2 marks A white drunk victim was helped more than a black drunk victim. More people left the critical area when the drunk victim was white compared to when the drunk victim was black. More comments were made when the drunk victim was white compared to when the drunk victim was black. Same-race helping was seen more than other-race helping. e.g., 1 mark On a higher percentage of trials, a white drunk victim was helped. <u>More</u> people left the critical area when the drunk victim was white. More likely to help same-race (drunk) victim.	2	If candidate compares drunk and ill victims = 1 mark max. "Drunk received (spontaneous) help on 19 out of 38 trials = 2 marks. Responses do not need to mention 'drunk' to get credit as this is implied from the question. Ignore references to speed of helping.

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Question	Answer	Marks	Guidance
4	Describe how Hassett et al. followed ethical guidelines in relation to animals in their study about monkey toy preferences. 1 mark per correct point up to 4 marks 1 mark available for identifying a relevant ethical guideline. e.g., They followed the ethical guideline of housing (1 mark: identification) as the monkeys were socially housed in accordance with them being a social species (1 mark). (There was no deprivation of) the monkeys as water was continuously available/fed regularly on appropriate diet/given access to food and water. The monkeys had a 25 m x 25 m outdoor enclosure (to roam around in). The indoor enclosure was temperature-controlled (for comfort). They followed the guideline stipulated by NIH with environmental enrichment so again no deprivation. There was minimum harm as the toys chosen were not dangerous. They followed the guideline for species, and the purpose of the study was to study organisms close to humans on the evolutionary scale (used rhesus monkeys). No direct observations/observed via cameras to reduce distress. The monkeys were kept/tested in an area they were familiar with (to reduce stress). There are other creditworthy responses.	4	Ignore reference to ethical guidelines for human participants. Go with the intention of the candidate. Relevant guidelines are: Harm/distress Species Number Housing Reward/deprivation Tick-e = relevant guideline identified The candidate can score 4 marks even if a guideline is not explicitly named.

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Question	Answer	Marks	Guidance
5(a)	From the study by Hölzel et al. (mindfulness and brain scans): ‘Acting with awareness’ was a factor measured by the ‘Five Facet Mindfulness Questionnaire’. Outline what is meant by ‘acting with awareness’ in this study. 2 marks for full outline. 1 mark for partial outline. This is focusing on current behaviour/actions instead of behaving automatically (2 marks). Focusing on current behaviour (1 mark).	2	For 2 marks there needs to be mention of: Conscious focus (opposed) to unconscious. Do not credit ‘being aware of....’ ‘Know what are doing’/thinking or equivalent = 1 mark (take as conscious/current).
5(b)	Outline <u>one</u> strength of the Five Facet Mindfulness Questionnaire as used in this study. 1 mark for identifying the strength. 1 mark for outlining the strength via example from the study. e.g., The FFMQ generated quantitative data which allowed for statistical comparisons (1 mark: identifying), therefore, the scores could be compared before and after MBSR training to see any changes/effects of the programme (1 mark: example). The FFMQ is a standardised test for mindfulness (1 mark: identifying). There are other creditworthy strengths, including used as a baseline measure, used in other studies (reliable).	2	Do not credit general strengths about the study by Hölzel. It must be about the FFMQ. Do not credit anything being ‘easier’

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Question	Answer	Marks	Guidance
6(a)	In the background to their study, Perry et al. outlined how biological factors affect interpersonal distance (personal space) preferences. Outline how biological factors affect interpersonal distance (personal space) preferences. 1 mark per correct point. Oxytocin (may) plays a role in personal space/empathy/social bonding/social salience etc. Lesions in the amygdala appear to reduce the need for personal space. Amygdala activity in healthy individuals is correlated with feeling uncomfortable at close distances. Amygdala activation is affected by levels of oxytocin. In some contexts, oxytocin promotes any aversion to risk/envy/lack of cooperation. Oxytocin can also affect the personal space needed between self and someone perceived as attractive. There are other creditworthy responses.	3	Do not credit procedure or findings from the study by Perry. There is no identification mark available. Do accept 'healthy amygdala may prefer further interpersonal distance'
6(b)	Two friends, Alexandre and Derek are discussing the ethics of the study by Perry et al. (personal space). Alexandre says the study is ethical, but Derek says it is not ethical. Outline <u>one</u> reason why Alexandre is correct and one reason why Derek is correct. For each reason: 1 mark for evidence/relevant ethical guideline and 1 mark for explanation.	4	If the candidate mixes up Alexandre and Derek (e.g. says Derek but gives an ethical based answer) then max 1 <i>per person</i> and annotate with a ? Do not credit deception (including ID mark) for the following arguments: - Not knowing whether they were being given OT or placebo - The idea that they never had the conversation in Exp2 <u>without reference to this being distressing</u>

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Question	Answer	Marks	Guidance
6(b)	e.g., Alexandre Written consent was taken from the participants (1 mark: guideline). They knew the study would be about personal space/knew they would have oxytocin (1 mark: explanation). The ethical committee at the Medical Centre/University approved the study as being ethical/required it (1 mark: alternative explanation). The task of watching someone get closer is minimising risk (1 mark: guideline). They could press the spacebar to stop the figure approaching more, protecting them from psychological stress (1 mark: explanation). e.g., Derek In experiment 2 they were told they would be chatting with another participant/ a computer would calculate an average room for them <u>and this might have been distressing</u> (1 mark: explanation). This never happened, so the Ps were deceived (1 mark: guideline) The act of intruding into someone's personal space (even if it was an animation) can still be stressful/harmful (1 mark: guideline). There was also no way of knowing if any participant would react to oxytocin (1 mark: explanation) so there was risk/potential physical harm involved (1 mark: guideline). There are other creditworthy responses.		So, only award the deception ID mark if the argument is linked to feeling stressed, otherwise = 0 If ethical guideline is the same for Alexandre and Derek, then can only award the ID mark once. However, physical and psychological harm can be awarded separately.

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Question	Answer	Marks	Guidance
7	The debate about individual and situational explanations relates to the study by Dement and Kleitman (sleep and dreams). Outline what is meant by this debate, including <u>one</u> example from the individual explanation and <u>one</u> example from the situational explanation from the study by Dement and Kleitman. 1 mark for outlining individual explanation plus 1 mark for example from Dement. 1 mark for outlining situational explanation plus 1 mark for example from Dement. e.g., individual The individual side refers to behaviours from factors within the person (dispositional) (1 mark). All the dreams reported were unique, like throwing tomatoes at each other, showing that a person's individual personality is seen in their dreams (1 mark). e.g., situational The situational side refers to behaviour from factors in the external environment (1 mark). The participants were sleeping in a laboratory with an EEG attached to them so this scenario may have affected their ability to recall dreams/estimated time in REM (1 mark). There are other creditworthy examples.	4	Ignore tautological definitions, including “individual differences or individual factors” Example marks can <u>only</u> be awarded for Dement and Kleitman's study or related to sleep and dreaming in general. Tick-e = example mark (go with the logic/intention of the candidate). Do not credit ‘different people have different dreams’ for the example mark for the individual explanation.

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Question	Answer	Marks	Guidance
8(a)	Carole, a language teacher, has noticed that her students have difficulty concentrating when listening to a recording of people talking in a second language. Her students have difficulty recalling the information from this recording. Carole needs to help her students and has come to you for advice. Using your knowledge of the study by Andrade (doodling): Outline the advice you would give to Carole. 1 mark per piece of advice clearly based on the study by Andrade. e.g. Carole could give each student a piece of paper. That has shapes on it They can colour/shade them in. There should be a margin to write notes/target information. Tell the students not to worry about being neat/their neatness (at shading). She could ask them to focus on specific pieces of information in the listening task. She must tell them that there will be a test after the listening tasks. She needs to tell them not to engage in free doodling/drawing their own doodles. Let them listen in a (dull) quiet room There are other creditworthy pieces of advice.	4	No credit for justifying advice as this is not what the question is about. Do not credit the following: ‘Doodling’, ‘doodle’ or ‘secondary task’ by itself. Scribbling. Give them a monotonous recording. Give them a <u>surprise</u> test. Allow them to draw their own doodles. Ask them to start <u>shading</u> in the <u>shapes</u> = 2 marks A different explicitly named secondary task can be awarded 1 mark (e.g., fidget toy).

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Question	Answer	Marks	Guidance
8(b)	Explain <u>one</u> reason for <u>one</u> piece of advice you outlined in part (a). 2 marks for full/detailed reason 1 mark for partial/brief reason e.g., 2 marks One result from the study showed that the group who doodled whilst listening to a dull telephone recording, could recall more (monitored) information/(incidental) information, showing that doodling is good for concentration/recall. Doodling could avoid/avoids <u>daydreaming</u> to help concentration/aiding memory recall. A dull quiet room will not have other <u>sounds</u> so concentration should be better. Doodling can improve concentration/attention which helps improve memory recall. e.g., 1 mark In the study by Andrade, doodling aided memory recall. Doodling could avoid/avoids daydreaming. Doodling can aid concentration/information processing/attention A dull/quiet room will allow for better concentration.	2	The response must be linked to something mentioned in Q8(a). Only credit advice chosen by the candidate that is based on the study by Andrade.

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Question	Answer	Marks	Guidance
9(a)	From the study by Saavedra and Silverman (button phobia): Describe the participant used in this study. 1 mark per correct point made. (one) boy/male. 9-year-old. Hispanic/American. He was presented (by his mum) to a Child Anxiety and Phobic Program. He did <u>not</u> meet the criteria for OCD. He did meet the criteria (DSM-IV) for a phobia. He had experienced a bowl of buttons falling on him (at school). Had his phobia at 5 years of age/4 years prior to study.	4	List is definitive. Do not credit he had a phobia of buttons as this is in the question.
9(b)	Explain <u>one</u> similarity and <u>one</u> difference between the study by Saavedra and Silverman (button phobia) and the study by Bandura et al. (aggression). Do <u>not</u> refer to sampling in your answer. Use the marking grid below. 4 marks for the similarity, e.g., quantitative data collection, both about learnt behaviours. 4 marks for the difference, e.g., experimental vs. non-experimental, sample, learning theory focused on.	8	Award L1-L4 for the similarity Award L1-L4 for the difference For Level 4 there must be some attempt at <i>explaining</i> the similarity/difference. For similarity: Both used children = L1 Both from the learning approach/follow learning assumptions = L1

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Question	Answer	Marks	Guidance
9(b)	e.g., difference e.g., 4 marks The two studies focus on a different theory from the learning approach. Bandura focused on social learning involving imitation and observation. Saavedra focused on operant conditioning/classical conditioning whereby the boy got rewarded by his mum during the treatment of his button phobia. So, Bandura is about vicarious learning, but Saavedra is about direct 'hands-on' experiences (explanation). e.g., 3 marks The two studies focus on a different theory from the learning approach. Bandura focused on social learning involving imitation and observation. Saavedra focused on operant conditioning/classical conditioning. e.g., 2 marks The two studies focus on a different theory from the learning approach. Bandura focused on social learning involving imitation and observation. e.g., 1 mark The two studies focus on a different theory from the learning approach.		For difference: Different aims = L1 Quantitative vs qualitative = L2 max If the candidate does not identify the similarity or difference explicitly so it reads like a description of both studies = L1

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Question	Answer		Marks	Guidance
9(b)	Mark/Level	Description		
	4	The similarity/difference is well explained using both studies as examples.		
	3	The similarity/difference is well explained but only one study is used as an example OR both studies are used briefly.		
	2	The similarity/difference is brief with an attempt at using at least one study as an example OR The similarity/difference is well explained but there is no study evidence.		
	1	The similarity/difference is brief with no attempt at using the studies as examples.		
	0	No creditable response.		

Question	Answer	Marks	Guidance
10	Evaluate the study by Pozzulo et al. (line-ups) in terms of <u>two</u> strengths and <u>two</u> weaknesses. At least one of your evaluation points <u>must</u> be about ecological validity. Strengths include reliability (standardisation), quantitative data, validity, ethics. Weaknesses include ecological validity, ethics, generalisability, quantitative data.	10	

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Question	Answer	Marks	Guidance									
10	Example: in detail The procedure was standardised so could be replicated. For example, for every participant the instructions for the line-up identification process were the same, and we know that the cartoon targets were Dora and Diego. Therefore, the study can be tested for reliability. Example: brief but in context The sample came from a participant pool at Eastern Ontario University so they might not represent other people as they could be more motivated to participate Example: no context There were controls in place so they could establish cause and effect/has internal validity <table><tr><th>Level</th><th>Description</th><th>Mark</th></tr><tr><td>5</td><td> - Very good evaluation including the named issue. - Thoroughly addresses both strengths and both weaknesses in detail. - Selection of evidence is very thorough and effective. </td><td>9–10</td></tr><tr><td>4</td><td> - Good evaluation including the named issue. - Addresses strengths and weaknesses but may include three or four points. The majority of the points are in depth. - Selection of evidence is thorough and effective. </td><td>7–8</td></tr></table>	Level	Description	Mark	5	- Very good evaluation including the named issue. - Thoroughly addresses both strengths and both weaknesses in detail. - Selection of evidence is very thorough and effective.	9–10	4	- Good evaluation including the named issue. - Addresses strengths and weaknesses but may include three or four points. The majority of the points are in depth. - Selection of evidence is thorough and effective.	7–8		
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Question	Answer			Marks	Guidance
10	Level	Description	Mark		
	3	- Mostly appropriate evaluation but may not include the named issue. - Addresses either two strengths or two weaknesses in detail or one of each in detail or all four briefly. - Selection of evidence is mostly effective.	5–6		
	2	- Weak evaluation and may not include the named issue. - Addresses either a strength or a weakness. Evaluation points are brief. - Some points may have no context. - Selection of evidence is sometimes appropriate.	3–4		
	1	- Little or no evaluation. - Discussion of strengths and weaknesses is absent or superficial. - Selection of evidence is limited.	1–2		
	0	No creditable response.			