

Cambridge International AS & A Level

PSYCHOLOGY
Paper 4 Specialist Options: Application and Research Methods
May/June 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 May/June 2025 series for most Cambridge IGCSE, Cambridge International A and AS Level components, and some Cambridge O Level components.

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.

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.

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.

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
✓	Correct point
×	Incorrect point
BOD	Benefit of doubt
REP	Repetition
?	Answer unclear
NOM	Used in the 10-mark planning Q in Section B to indicate wrong method
Е	Used in the 10-mark planning Q in Section B to indicate ethics included
NAQ	Not answering question
SEEN	
+	Supportive point
В	Used in the 10-mark planning Q in Section B to indicate bullet point included
NE	Used in the 10-mark planning Q in Section B to indicate no ethics included

Generic levels of response marking grids Table A: AO2 Application

The table should be used to mark the 10 mark 'Plan a study' questions (9, 10, 11 and 12).

Level	Description	Marks
5	 The response: uses an appropriate method as required by the question. describes a good range of appropriate method-specific features with accurate detail. describes a good range of appropriate general methodological features with accurate detail. shows very good understanding and the plan is coherent and is sufficient for replication. clearly applies knowledge of psychological methodology and terminology involved in planning a study. Uses and shows good understanding of ethical guidelines. 	9–10
4	 The response: uses an appropriate method as required by the question. describes a range of appropriate method-specific features in detail. describes a range of appropriate general methodological features with some in detail. shows good understanding and the plan is coherent. applies knowledge of psychological methodology and terminology involved in planning a study. uses ethical guidelines appropriately. 	7–8
3	 The response: uses an appropriate method as required by the question. describes a range of appropriate method-specific features although these may lack detail. describes some general methodological features although these may lack detail. shows limited understanding and the plan has some coherence. applies some knowledge of psychological methodology and terminology involved in planning a study. refers to ethical guidelines. 	5–6
2	 The response: uses an appropriate method as required by the question. identifies (lists) some appropriate method-specific features. identifies (lists) a limited range of appropriate general methodological features. shows little understanding and the plan would be difficult or impossible to replicate. makes some attempt to apply knowledge of psychological methodology and terminology involved in planning a study. ethical guidelines listed or absent. 	3–4

Level	Description	Marks
1	 The response: may not use the method required by the question. may not answer the question set. identifies a few general and/or method-specific features and detail is limited. shows very little understanding and the plan would be impossible to replicate. makes a limited attempt to apply knowledge of psychological methodology and terminology involved in planning a study. 	1–2
0	 No response worthy of credit. The candidate describes the study listed on the syllabus. The plan is unethical. 	0

Question	Ans	swer	Marks
1		app (2013) on blood/injection/injury port scale (SUDS) to assess the change	
1(a)(i)	Identify two situations included in the other than 'getting a phlebotomy'. Syllabus 1.4.3 Key study on treating blocognitive-behavioural therapy (CBT) will DeLapp (2013). Marks: 1 mark for each correct answer Note: wording does not need to be exampled. Definitive answers: Getting a physical or stress test Getting blood pressure taken at CVS (a local pharmacy) or Wal-Mart	ood/injection/injury phobia using ith applied tension: Chapman and	2
	Getting blood pressure by a nurse Taking blood pressure myself	Wife taking my blood sugar Seeing someone get a phlebotomy in a video	
		Wrapping a tourniquet around my arm and touching my veins	

Question	Answer				Marks
1(a)(ii)	Give the results for <u>one</u> situation of the SUDS hierarchy identified in part (a) that show a change in the anxiety levels of 'T'.				2
	Marks: 1 mark for comment related to a situa numbers but no numbers.	ation and c	omment abou	ut	
	2 marks for comment plus reasonably accura	ate numbe	rs for that situ	uation.	
	Note: numbers can be before versus during, versus after. 'During' is the results as the the	_	•		
	Definitive answers:		,		
	Situation	Before	During	After	
	Getting a physical or stress test	100			
	Getting blood pressure taken at CVS (a local pharmacy) or Wal-Mart	90			
	Getting blood pressure by a nurse	85			
	Taking blood pressure myself	75	55>45>35	20	
	Seeing someone get a phlebotomy in person	55	65>45	30>0	
	Taking my own blood sugar	55			
	Wife taking my blood sugar	50	45	20	
	Seeing someone get a phlebotomy in a video	50			
	Wrapping a tourniquet around my arm and touching my veins	45	40>30>	20>15	
1(b)	Suggest one reason why the data gathere	d from 'T	' might not b	e valid.	2
	Marks: Award 2 marks for an appropriate sugstudy with detail/elaboration/example. Award suggestion identified but not applied.				
	Answers may include (other appropriate resp	nis subject	ive rating of a		
	T might be responding to social desirabil mark) rating of anxiety level so the meas what T is claiming (2 marks)				

Question	Answer	Marks
1(c)	Explain two strengths of using quantitative data to assess the effectiveness of blood/injection/injury anxiety measures.	4
	Marks: Up to 2 marks for each strength ×2	
	Award 2 marks for an appropriate strength stated and applied as required by the question with detail/elaboration/example. Award 1 mark for an appropriate strength stated but not applied.	
	 Answers may include (other appropriate responses to be credited): Strengths: quantitative data is unambiguous (and objective) fact (1 mark) this allows the therapist to make a precise judgement about the current state of anxiety in the blood phobic (2 marks) test producing quantitative data can be replicated e.g. measure can be repeated on numerous occasions (1 mark) and so progress, or lack of it, in the blood phobic can be seen (2 marks) quantitative data can be used for statistical analysis/visual displays (1 mark) to compare with other people with a blood phobia, for example (2 marks) 	
	Note: do not credit 'statistical analysis' and 'make comparisons' as two points unless justified.	
	Note: credit a comparison/contrast (such as with qualitative data) as + mark.	

Question	Answer	Marks
2	Ellis developed rational emotive behaviour therapy (REBT) for the treatment mood (affective) disorders.	
2(a)	Outline how irrational beliefs are changed by REBT.	2
	Syllabus 1.2.3 psychological therapies: – Ellis's rational emotive behaviour therapy (REBT).	
	Marks: Award 2 marks for a detailed outline. Award 1 mark for a partial outline (e.g. ABC only).	
	 Answers may include (<u>other appropriate responses to be credited</u>): Rational Emotive Behaviour Therapy. (REBT) Ellis focused on how illogical beliefs are maintained through: A: an activating event, B: the belief held about A, C: the consequences – thoughts, feelings or behaviours – resulting from A. REBT therefore involves: D: disputing the irrational beliefs, E: the effects of successful disruption of the irrational beliefs. 	
	Note: therapy is changing beliefs therefore A, B & C are only appropriate to explain D and E.	
	Note: ABC only =1. D=1; E=1 (both =2). ABC + D or E =2	
	Note: Question is 'Outline' so terms need more than identification for 1 mark.	
2(b)	Suggest how the effectiveness of REBT could be measured using a questionnaire.	2
	Marks: Award 2 marks for an appropriate suggestion stated and applied to study with detail / elaboration / example. Award 1 mark for an appropriate suggestion identified but not applied.	
	 Answers may include (<u>other appropriate responses to be credited</u>): a questionnaire could be created which could include a range of closed questions (1 mark) asking about disruption of irrational beliefs on a 5-point scale for example (2 marks) a questionnaire could be created which could include a range of open questions (1 mark) asking in detail about disruption of irrational beliefs (2 marks) questions could be asked about coping with activating events' (1 mark) questions could be asked about successful disruption of the irrational beliefs (1 mark) with example (2 marks) 	
	Note: BDI is creditworthy if some detail of it is provided (21 items, closed, rating scale, etc.)	

Question	Answer	Marks
2(c)	Explain two strengths of using REBT to treat depression.	4
	Marks: Up to 2 marks for each strength $\times 2$ Award 2 marks for an appropriate strength stated and applied as required by the question with detail / elaboration / example. Award 1 mark for an appropriate strength stated but not applied.	
	 Answers may include (other appropriate responses to be credited): Strengths: technique can be applied by anyone, in any place at any time (1 mark) so the 'patient' can apply the disputing of beliefs themselves when they are exposed to a relevant activating event (2 marks) research has supported its effectiveness compared to a control group (1 mark) e.g. Lyons and Woods, 1991) found REBT showed significant improvement (2 marks). research has supported its effectiveness compared to other therapies (1 mark) e.g. Iftene, 2015) found REBT to be as effective as anti-depressants (2 marks). 	
	Note: credit a comparison/contrast (such as use of drugs) as + mark.	

Question		Answer	Marks
3	From the key study by Robso spacing:	on et al. (2011) on consumers' responses to t	able
3(a)(i)	table?'. One of the questions	y you would feel about being seated at this that the participants then had to rate on ld be overheard by other diners'.	2
	Give <u>two</u> other questions tha	t the participants were asked to rate.	
	Syllabus: 2.2.3 key study on co et al. (2011).	onsumers responses to table spacing: Robson	
	Marks: Award 1 mark for each of Definitive answers: Note: questions do not need to Note: answers need to be more		
	Sitting at this table, I would:		
	feel like the restaurant cares about me	disturb the next table if I had to get up	
	have the kind of experience I want	be overheard by other diners	
	have an exciting meal experience	feel like I was being watched	
	feel like a VIP	feel exposed	
		re me feel: bothered, contented, uptight, distressed, lively, tense, passive, crowded,	
	It would be fine with me if I sa	t at this table	
	If the host were to show me to somewhere else.	o this table, I would ask to be seated	
3(a)(ii)	Outline the type of rating sca questions.	le used by participants to answer these	2
	Marks: Award 1 mark for each	correct feature.	
	Definitive answers: Likert-type scale (1 mark) s (1 mark) OR	seven-point scale/1–7 (1 mark) agree/disagree	
) via 'neither agree nor disagree' to strongly	

Question	Answer	Marks
3(b)	Suggest one way to collect data about the effect of table spacing in restaurants, other than using an online questionnaire with closed questions.	2
	Marks: Award 2 marks for an appropriate suggestion stated and applied to study with detail / elaboration / example. Award 1 mark for an appropriate suggestion identified but not applied.	
	Answers may include (<u>other appropriate responses to be credited</u>): • observation using behavioural categories (1 mark) related to table spacing (2 marks)	
	interview (face-to-face or by telephone) with open questions, or closed questions without a rating scale (1 mark) related to table spacing (2 marks) guestions with open questions (1 mark) related to table spacing (2 marks)	
	 questionnaire with open questions (1 mark) related to table spacing (2 marks) 	
3(c)	Explain <u>one</u> strength and <u>one</u> weakness of using rating scales to assess consumers' responses to table spacing.	4
	Marks: Up to 2 marks for each strength and 2 marks for each weakness. Award 2 marks for an appropriate strength/weakness stated and applied as required by the question with detail / elaboration / example. Award 1 mark for an appropriate strength/weakness stated but not applied.	
	Answers may include (<u>other appropriate responses to be credited</u>): Strengths:	
	scales provide participants with fixed responses: easier to choose and easier to analyse (1 mark) so researchers gain data about space at tables which is easier to analyse than qualitative data (2 marks)	
	 a rating scale such as a 7-point scale allows a wider range of responses than a 3-point of 5-point scale (1 mark) in this study there is a wide scale such as 'somewhat agree/disagree' (2 marks) Weaknesses: 	
	 Weaknesses: a rating scale may include a mid-point (neutral response) which might be used as an opt-out (1 mark) and so the effect of table spacing cannot be measured (2 marks) 	
	 using a scale provides quantitative data and there is no opportunity to gather qualitative data (1 mark) so no opportunity to give an explanation for a choice of response such as 'why they feel they were being watched by those on nearly tables'. (2 marks). 	

Question	Answer	Marks
4(a)	Outline what is meant by brand awareness.	2
	Syllabus: 2.5.3 brand awareness, brand image and effective slogans including types and function of slogans; guidelines.	
	Marks: Award 1 mark for a partial outline e.g. 'can identify/is familiar with a brand' Award 2 marks for a detailed outline (example/elaboration) e.gbased on	
	Answers may include (other appropriate responses to be credited): brand awareness is the extent to which consumers are familiar with a brand's identity and its product or services (1 mark) any example/elaboration (+1 mark) based on slogans, logos or name (+1)	
	Note: common indicators of brand awareness are brand recall and brand recognition.	
	 brand recall is the respondent's ability to remember the brand without any aid (+1 mark). brand recognition is the respondent's ability to identify the brand from a list/array that is provided (+1 mark) 	
4(b)	Suggest one way in which brand awareness could be measured, other than a rating scale.	2
	Marks: Award 2 marks for an appropriate suggestion stated and applied to study with detail / elaboration / example. Award 1 mark for an appropriate suggestion identified but not applied.	
	 Answers may include (<u>other appropriate responses to be credited</u>): conduct an experiment (type needed) (1 mark): participants can be exposed to different brands (IV) and complete various tasks (DV) or are then asked about their experiences and/or feelings/satisfaction. give a questionnaire or interview (include technique or format) (1 mark) to determine brand experiences based on what people think about each brand. 	
	conduct an observation (features) (1 mark) in with various brands and record time taken to identify an item/what product is associated with it.	
	Note: can award 1 mark for correct example with identified method (no detail)	

Question	Answer	Marks
4(c)	Explain <u>one</u> strength and <u>one</u> weakness of the measurement you suggested in part (b).	4
	 Marks: Up to 2 marks for each strength and 2 marks for each weakness. Award 2 marks for an appropriate strength/weakness stated and applied as required by the question with detail / elaboration / example. Award 1 mark for an appropriate strength/weakness stated but not applied. Answers may include (other appropriate responses to be credited): Strengths and Weaknesses experiment: any strength/weakness of a laboratory experiment or a field experiment (1 mark) related to brand awareness (2 marks) interview: any strength/weakness of a face-to-face or phone or online interview OR type of interview (structured/semi/unstructured) (1 mark) related to brand awareness (2 marks) questionnaire: any strength/weakness of closed or open questions OR type of format (paper/pencil or online or postal) (1 mark) related to brand awareness (2 marks) observation: any strength/weakness (about four features of observations) (1 mark) related to brand awareness (2 marks) 	
	Note: strengths and weaknesses must relate to answer in (b) else 0 marks	

Question	Answer	Marks
5	From the key study on positive psychology in schools by Shoshani and Steinmetz (2014):	
5(a)(i)	Identify two features of the sample used in this study. Syllabus: 3.5.3 Key study on using positive psychology in schools to improve mental health: Shoshani and Steinmetz (2014) Marks: Award 1 mark for each correct feature Definitive answers: participants were: 1167 (at the outset) OR 1038 (completed sets of data by the end) the seventh, eighth and ninth grades aged 11.8–14.7 years at the beginning of the study from two large middle schools in the center of Israel. were mostly Jewish (98 %). 57 % of the study population reported middle socioeconomic status family status (64 % lived in a two-parent family, 36 % lived in a single-parent family)	2
	Note: 0 marks for 'mix of males & females'. M/F numbers not known.	

Question	Answer				
5(a)(ii)	Give the <u>two</u> reasons why some participants withdrew from the study.	2			
	Marks: Award 1 mark each correct reason (numbers are not needed but may be provided).				
	Definitive answers (from study): • due to absence (34 intervention, 22 control) • refusal to complete questionnaires (2 intervention, 4 control)				
	Note: intervention group a total of 65 students did not complete the study (65 intervention, 59 in control; this is not a reason); 'later dropped out' (29 intervention, 33 control) is not a reason				
5(b)	The study included a 'wait-list control condition'.				
	Suggest one reason for including this 'wait-list control condition'.				
	Marks: Award 2 marks for an appropriate suggestion stated and applied to study with detail / elaboration / example. Award 1 mark for an appropriate suggestion identified but not applied.				
	 Answers may include (other appropriate responses to be credited). schools and appropriate pupils are 'ready and waiting' (1 mark) six school principals agreed to be on the wait-control list (+1 mark) OR Another school was selected to the wait list control group, based on similar features to the intervention school (1 mark) such as socio-demographic characteristics and number of total students (+1 mark). schools and appropriate pupils are prepared to be the intervention group (1 mark) with pupils continuing with the regular curricula of the social science lessons which were to impart information and to discuss issues related to the period of adolescence (+1 mark) 				
	 these schools act as a baseline (1 mark) to which the intervention group can be compared (2 marks) 				

Question	Answer			
5(c)	Explain <u>one</u> strength and <u>one</u> weakness of using longitudinal studies to investigate positive psychology in schools.	4		
	Marks: Up to 2 marks for each strength and 2 marks for each weakness. Award 2 marks for an appropriate strength/weakness stated and applied as required by the question with detail / elaboration / example. Award 1 mark for an appropriate strength/weakness stated but not applied.			
	Answers may include (<u>other appropriate responses to be credited</u>): Strengths:			
	it can test to see if what was taught remained with a student over time (1 mark) related to study (2 marks)			
	it can be used as a pilot study on which to base future studies (1 mark) related to study (2 marks)			
	Note: only credit 'rich, in-depth information if fully justified. No credit for bias due to 'relationships'			
	Weaknesses:			
	 participants are young and can be influenced by things later in life 'windows of opportunity' at different ages (e.g. Lau et al) (1 mark) related to study (2 marks) 			
	participants move to different types of education which may or may not promote the same values (1 mark) related to study (2 marks)			

Question	Answer	Marks
6(a)	Identify <u>two</u> behavioural categories included in the UAB pain behaviour scale.	2
	Syllabus 3.3.2 behavioural/observational measures: UAB pain behaviour scale.	
	Marks: Award 1 mark for each correct category.	
	 Definitive answers (from UAB): vocal complaints verbal vocal complaints non-verbal (groans moans gasps etc.) down time (time spent lying down because of pain per day from 8 AM to 8 PM) facial grimaces standing posture mobility body language (clutching rubbing site) use of visible support equipment (braces, crutches, cane, leaning on furniture etc.) stationary movement (ability to stay still) medication use Note: can credit examples (from above) without category e.g. rubbing but no alternative word. 	

Question	Answer	Marks
6(b)	Suggest one way in which acute pain can be managed using a psychological treatment.	2
	Marks: Award 2 marks for an appropriate suggestion stated and applied to study with detail / elaboration / example. Award 1 mark for an appropriate suggestion identified but not applied.	
	Answers may include (<u>other appropriate responses to be credited</u>): • outline of how attention diversion /non-pain imagery /cognitive redefinition works (1 mark) with outline related to acute pain (example probably included) (2 marks)	
	Note: needs more than merely 'acute pain'. Answer should use an example of acute pain, such as a headache.	
6(c)	Explain two weaknesses of pain measures that use observation to collect data.	4
	Marks: Up to 2 marks for each weakness Award 2 marks for an appropriate weakness stated and applied as required by the question with detail / elaboration / example. Award 1 mark for an appropriate weakness stated but not applied.	
	Answers may include (other appropriate responses to be credited):	
	 Weaknesses: the observer may misinterpret the pain behaviour of the patient (1 mark) incorrect interpretation could lead to too much or too little medication being prescribed (2 marks) the observer does not ask the person experiencing pain about their pain (1 mark) so perhaps missing essential detail about whether the person thinks their pain is easing (2 marks) observations can be done without the person's knowledge (1 mark) so perhaps missing essential detail about whether the person thinks their pain is easing (2 marks) the observer is not experiencing the pain of the person being observed (1 mark) related to pain 	
	 the observer may miss important pain behaviours (1 mark) related to pain (2 marks) 	

Question	Answer			
7	From the key study on reasons for sabotage in the workplace by Giacalone Rosenfeld (1987):			
7(a)(i)	'Subjects were told that they should not write their names or any identifying information on the questionnaires.'			
	Outline why this was necessary in this study.			
	Syllabus: 4.5.3 Key study reasons for sabotage in the workplace: Giacalone and Rosenfeld (1987). Marks: Award 2 marks for outline and related to study . Award 1 mark for brief outline			
	Most likely answer: Confidentiality so participants can remain anonymous (1 mark) and management cannot behave inappropriately towards them (tell off/demote/sacked) because of their answers (2 marks)			
	Note: answer does not have to use the term confidentiality.			
7(a)(ii)	'Each subject was also advised that the questionnaires were being used for an industrial psychology seminar and that management would not have access to the responses.'	2		
	Outline why this was necessary in this study.			
	Marks: Award 2 marks for outline and related to study . Award 1 mark for brief outline			
	Most likely answer: Deception so participants remain naïve about the purpose of the study (1 mark) because otherwise participants might not be honest about sabotage and data gathered might not be valid (2 marks)			
	Note: answer does not have to use the term deception.			

Question	Answer					
7(b)	The questionnaires used in the study were constructed by an employee who had recently resigned.	2				
	Suggest <u>one</u> reason why an employee who had recently resigned was chosen to help construct the questionnaires.					
	Marks: Award 2 marks for an appropriate suggestion stated and applied to study with detail / elaboration / example. Award 1 mark for an appropriate suggestion identified but not applied.					
	Answers may include (<u>other appropriate responses to be credited</u>). • the ex-employee had experience with the company (1 mark) this would provide more insight into the reasons for sabotage than from any other source (2 marks)					
	the ex-employee knew the company and ways in which workers had committed sabotage actions (1 mark) this would provide more insight into the reasons for sabotage than from any other source (2 marks)					
	the ex-employee may have resigned rather than be sacked for committing an act of sabotage (1 mark) and so the researcher has first-hand knowledge (2 marks)					
	the ex-employee would not be returning to work for the company (1 mark) and so would provide honest answers; tell the employers the truth (2 marks)					
7(c)	Explain two reasons why generalisations cannot be made about sabotage from one study.	4				
	Marks: Up to 2 marks for each 'cannot generalise' ×2 Award 2 marks for an appropriate 'cannot generalise' stated and applied as required by the question with detail / elaboration / example. Award 1 mark for an appropriate 'cannot generalise' stated but not applied.					
	Answers may include (<u>other appropriate responses to be credited</u>): Reasons:					
	 definitions of what is and is not sabotage might differ from one company to another (1 mark) Giacolone and Rosenfeld listed methods and forms based on one of their workers (2 marks) 					
	 'work tools' (e.g. machinery) in one industry might be different from work tools in another industry (1 mark). Giacolone and Rosenfeld's study was conducted in an electrical factory very different from an office (2 marks) any one study will be conducted in a particular country which may not generalise to other countries (1 mark). Workers in some countries may never sabotage! (2 marks) 					
	Note: 0 marks for sample size/number of workers. Study found many reasons among the 38 workers.					

Question	Answer	Marks
8(a)	Explain what is meant by an 'error of commission' when investigating accidents at work.	2
	Syllabus: 4.4.3 accidents at work focusing on human errors (errors of omission, commission, sequencing and timing). Marks: Award 2 marks for explanation with detail/example. Award 1 mark for explanation with no detail or no example.	
	 Answers may include (<u>other appropriate responses to be credited</u>): an error of commission is where a worker misuses or misapplies standard/procedural information (1 mark) it is: an error because an operator performs an action which is incorrect or 	
	 inappropriate (+1 mark) where an operator performs an incorrect additional action which should not have been done (+1 mark) 	
	any appropriate example (+1 mark) such as switching off a functional engine causing a plane to crash (Kegworth)	
	 Candidates may also write about reasons for errors of commission (+1 mark) only credited as extension of initial explanation (alone NAQ), such as 	
	 belief perseverance: an operator continues to use information in their decision-making that has previously been dismissed. sunk cost bias: an operator remains committed to a decision because of 	
	the time and effort that has already gone into that plan even though the plan may have become inappropriate.	
	 extra-evidentiary bias: an operator uses information despite having been told it should be ignored. hindsight bias: an operator falsely over-estimates the accuracy of their past knowledge. 	
8(b)	Suggest one way in which an error of commission could be reduced.	2
	Marks: Award 2 marks for an appropriate suggestion stated and applied to study with detail / elaboration / example. Award 1 mark for an appropriate suggestion identified but not applied.	
	 Answers may include (other appropriate responses to be credited): train the operator to fit the machine (1 mark) all operators should receive full initial training and then have compulsory refresher sessions (2 marks) design the machine/system to fit the operator (1 mark) ensure that the machine is appropriately designed with appropriate visual displays, audio warnings, appropriately designed controls (2 marks). introduce an accident reduction strategy such as token economy (1 mark) so workers are rewarded for not making errors at work (perhaps plus example) (2 marks) 	

Question	Answer	Marks
8(c)	Explain two weaknesses when gathering data about accidents at work.	4
	 Marks: Up to 2 marks for each weakness: Award 2 marks for an appropriate weakness stated and applied as required by the question with detail / elaboration / example. Award 1 mark for an appropriate weakness stated but not applied. Answers may include (other appropriate responses to be credited): Weaknesses: the operator may not tell the truth, exaggerate or underemphasise details (1 mark) which may lead to inaccurate conclusions about the reason for the accident (2 marks) the operator may be afraid that if they tell the truth they may lose their job (1 mark) and so what is said about the accident may be incorrect (2 marks) different definitions of 'accident' made by the operator/company/health and safety authorities (1 mark) resulting in accidents not being reported at all (2 marks) 	

Question	Answer	Marks		
9(a)	Plan a study using a postal questionnaire to investigate attributional styles in adults with depression. Your plan must include details about: • type(s) of data • sampling technique. Use Table A: AO2 Application to mark candidate responses to this question. Credit both general features and specific features of the plan.			
	The specific features of the plan should include: • technique (paper/pencil, online, postal) • format (open and/or closed) • examples of questions • question scoring/interpretation • number of questions Credit other elements of the plan should include (if appropriate): • sample and sampling technique • ethical guidelines • a procedure • a location • type of data, analysis of data, use of descriptive statistics • an aim or hypothesis (directional or non-directional)/null hypothesis • steps for making the study valid and reliable Credit other elements of the plan as appropriate using the marking grid. Note: Answers which merely post an ASQ without detail are restricted to Level 2 'identifies (lists) some appropriate method-specific features'.			

Question		Answer	Marks
9(b)	For one piece of psychological knowledge on which your plan is based:		
9(b)(i)	Describe	this psychological knowledge.	4
	disorder (u Psycholog	1.2.2 Explanations of mood (affective) disorders: depressive unipolar). ical explanations: learned helplessness/attributional style, including g. Seligman et al. (1988).	
	attributional situational cause), an consistent experience cause is eand depres	n: Seligman et al. (1988) extended learned helplessness; a person's al style determined why people responded differently to adverse events. If a person makes an internal attribution (they are the id if they believe that this is stable and global (the cause is and this applies everywhere), then they may feel helpless and may be depression. However, if they make other attributions (e.g. that the external or situational; or unstable and specific), then helplessness ssion are unlikely. depression is associated with an obal/stable pattern.	
	want very bac graduate sche get it. (12) You get a rais (1) You meet a fr you on your a (6) You do a proj praised. (9) Your spouse (has been treat (2) You have bee successfully fe (5) You give an in of a group annegatively. (8) You give an in of a group annegatively. (8) You can't get others expect (4) A friend come problem and you. (11) You go out or badly. Note: the Scould be u Attributions events (6 g about the chas an interest.	lly (e.g., important job, bool admission) and you e. iend who compliments ppearance. eet that is highly boyfriend/girl friend) ting you more lovingly. no looking for a job un- or some time. nportant talk in front d the audience reacts all the work done that of you. es to you with a you don't try to help. riend who acts hostilely n a date and it goes Seligman study is 'an example' so any appropriate alternative study	
	, ,	redit for BDI. It does not measure attributional style.	
	Marks	Description	
	3–4	The knowledge is appropriate. Relevant points are correctly described in good detail.	
	1–2	Basic points are identified with some elaboration and understanding. The answer lacks detail (a sentence or two).	
	0	No creditable response	

Question		Answer			
9(b)(ii)	Explain h plan your	ow you used <u>two</u> features of this psychological knowledge to study.	4		
		es should explain how the psychological knowledge described in informed their plan in part (a) .			
	For each f	feature:			
	Marks	Description			
	2	Suitable answer that relates a feature and explains how the feature was used, expanded or modified to make it appropriate to the plan. The knowledge has clearly been applied to the plan.			
	1	Basic answer that identifies a feature			
	0	No creditable response			
	Note	1 mark for explanation of follow on from (b)(i) ; 1 mark for explanation appearing in (a) ×2			
	questionna	Male and female participants can be sent an attributional style aire and comparisons can be made about differences in response to d and 6 bad events.			
9(c)(i)	Explain <u>o</u>	ne reason for your choice of type(s) of data.	2		
	Candidate	es must use the type(s)of data stated in (a).			
		narks: reason is given and applied to the plan nark: reason is given without being applied to the plan			
	relate qualita (1 ma both o	itative data can be statistically analysed by researchers (1 mark) d to plan (2 marks) ative data can allow participants to provide reasons for their answer rk) related to plan (2 marks) quantitative and qualitative data can be gathered to provide 'best of worlds' (1 mark) related to plan (2 marks)			

Question	Answer	Marks
9(c)(ii)	Explain one weakness of the use of a postal questionnaire in your study.	2
	Candidates must use the postal questionnaire stated in (a)	
	Award 2 marks: weakness is given and applied to the plan Award 1 mark: weakness is given without being applied to the plan	
	 Example postal means that the questionnaire can be treated like 'junk-mail' and thrown away (1 mark) related to plan (2 marks) the questionnaire could be started and then forgotten (1 mark) related to plan (2 marks) the questionnaire may not be returned because that may incur costs for the participant (1 mark) related to plan (2 marks). 	
9(c)(iii)	Explain one reason for your choice of sampling technique.	2
	Candidates must use the sampling technique stated in (a)	
	Award 2 marks: reason is given and applied to the plan Award 1 mark: reason is given without being applied to the plan	
	 Example: a random sample was chosen so everyone in the target population has an equal chance of participating (1 mark) related to plan (2 marks) an opportunity sample was chosen because large numbers can be obtained relatively more easily than other methods (1 mark) related to plan (2 marks) a volunteer sample was chosen because people are willing and more likely to participate; (1 mark) related to plan (2 marks). 	

Question	Answer	Marks	
10(a)	Plan a study using a field experiment to investigate the effect of food name on menu item choice. Your plan must include details about: type(s) of data dependent variable		
	Use Table A: AO2 Application to mark candidate responses to this quenched to both general features and specific features of the plan. The specific features of the plan should include:	e of or and	

Question		Answer	Marks	
10(b)	For one p	For <u>one</u> piece of psychological knowledge on which your plan is based:		
10(b)(i)	Describe	this psychological knowledge.	4	
		2.2.2 menu design psychology. The effect of food name on menue, including a study, e.g. Lockyer (2006).		
	of words of the selectifour focus the same group and distributed participant selection. desire for also of into customers reinforced effect of dichoice of i	rom Lockyer (2006): The purpose of this paper is to examine the use on a restaurant menu, and to evaluate the impact that they have on ion of menu items. The research comprised two distinct parts. First, groups were held examining responses to five menus, each with menu items but using different wording. The results from the focus alysis were used to develop a survey which was more widely districted. From the focus group it was revealed that the occasion and test in the dining experience influence the wording for menu item. Respondents discussed the mystique of the menu and confirmed a menu items that would not normally be prepared at home. It was erest the 'mouth-watering' effect that the words have on potential and what a strong persuader these words were. The survey the focus group research in many ways, also stressing the positive escriptive words such as 'Tender'; 'Golden' and 'Natural' to the menu items. **Lockyer study is 'an example' so any appropriate alternative study"		
	could be υ Marks	Description		
	3–4	The knowledge is appropriate. Relevant points are correctly described in good detail.		
	1–2	Basic points are identified with some elaboration and understanding. The answer lacks detail (a sentence or two).		
	0	No creditable response		

Question		Answer	Marks
10(b)(ii)		ow you used <u>two</u> features of this psychological knowledge to experiment.	4
		es should explain how the psychological knowledge described in informed their plan in part (a) . feature:	
	Marks	Description	
	2	Suitable answer that relates a feature and explains how the feature was used, expanded or modified to make it appropriate to the plan. The knowledge has clearly been applied to the plan.	
	1	Basic answer that identifies a feature	
	0	No creditable response	
	Note	1 mark for explanation of follow on from (b)(i) ; 1 mark for explanation appearing in (a) ×2	
	and some	One menu can be created, some items with 'standard food names' items with 'mouth-watering names such as 'Tender'; 'Golden' and The number of items ordered with each type of description can be .	
10(c)(i)	Explain <u>o</u>	ne reason for your choice of type(s) of data.	2
	Award 2 n	es must use the type(s) of data stated in (a) . narks: reason is given and applied to the plan nark: reason is given without being applied to the plan	
	relate quality (1 ma both o	itative data can be statistically analysed by researchers (1 mark) d to plan (2 marks) ative data can allow participants to provide reasons for their answer rk) related to plan (2 marks) quantitative and qualitative data can be gathered to provide 'best of worlds' (1 mark) related to plan (2 marks)	

Question	Answer	Marks
10(c)(ii)	Explain one weakness of your choice of type(s) of data.	2
	Candidates must use the type(s) of data stated in (c)(i) . Award 2 marks: weakness is given and applied to the plan Award 1 mark: weakness is given without being applied to the plan	
	 e quantitative data only provides numbers, it does not provide a reason behind the number unlike qualitative data (1 mark) related to plan (2 marks) e quantitative data may limit how a participant responds (1 mark) related to plan (2 marks) 	
	 quantitative data might reduce behaviour to a single number (1 mark) related to plan (2 marks) qualitative data often has no numbers so no descriptive statistics or statistical analysis (1 mark) related to plan (2 marks) qualitative data needs to be interpreted and if only one judge is used, this could result in bias (1 mark) related to plan (2 marks) 	
10(c)(iii)	Explain one reason for your choice of dependent variable.	2
	Candidates must use the dependent variable stated in (a) . Award 2 marks if an appropriate reason is given and justified. Explanation of why the specific DV was chosen (1 mark) related to study i.e. operationalised DV (2 marks) Award 1 mark if an appropriate reason is given but DV not operationalised.	
	Example: number of items chosen from menu with one type of wording compared with number of items chosen with alternative type of wording (1 mark) was chosen because it provides quantitative data allowing comparisons and descriptive statistics to be displayed (2 marks)	

Question			Answer	Marks
11(a)	Plan a study using a face-to-face interview to investigate the effectiveness of stimulation therapy/TENS for managing acute pain. Your plan must include details about: interview format sampling technique.			10
	The spect plan show the show t	h general features and cific features of the uld include: view technique phone or face-to-) rview format actured, cructured, semi-ctured). Stion format (open or closed) uples of questions	mark candidate responses to this question. specific features of the plan. The general features of the plan should include (if appropriate): sample and sampling technique ethical guidelines a procedure a location type of data, analysis of data, use of descriptive statistics an aim or hypothesis (directional or non-directional)/null hypothesis steps for making the study valid and reliable	
11(b)	For one p	iece of psychologica	l knowledge on which your plan is based:	
11(b)(i)	Syllabus: acupunctu Descriptio directs atte is transcut administer pain and r specific ty	n: stimulation therapy in: stimulation therapy in: stimulation therapy in the staneous electrical nervey red. Electrodes are placed electric shocks are	ntrolling pain. Alternative treatments: /TENS. s a 'counter-irritation' or distraction that tronger pain to the milder pain. One example estimulation (TENS) which is selfced on the skin near where the patient feels given, causing distraction. TENS increases action and release. Also reduces neuron	4
	Marks	Description		
	3–4	The knowledge is apply described in good de	propriate. Relevant points are correctly tail.	
	1–2		tified with some elaboration and inswer lacks detail (a sentence or two).	
	0	No creditable respons	se	

Question		Answer	Marks
11(b)(ii)	Explain he plan your	ow you used <u>two</u> features of this psychological knowledge to study.	4
		s should explain how the psychological knowledge described in informed their plan in part (a) .	
	For each f	eature:	
	Marks	Description	
	2	Suitable answer that relates a feature and explains how the feature was used, expanded or modified to make it appropriate to the plan. The knowledge has clearly been applied to the plan.	
	1	Basic answer that identifies a feature	
	0	No creditable response	
	Note	1 mark for explanation of follow on from (b)(i) ; 1 mark for explanation appearing in (a) ×2	
	questions	Structured interviews can be created asking participants closed about the technique being used, how effective it was in reducing pain and how invasive it was (such as the insertion of needles).	
11(c)(i)	Explain o	ne reason for your choice of interview format.	2
	Award 2 m	s must use the interview format stated in (a). narks: reason is given and applied to the plan nark: reason is given without being applied to the plan.	
	questia semquestiduringan uns	ctured interview was used so all participants received the same ions (1 mark) in the same order (1 mark) related to plan (2 marks). In structured interview was used so although there were fixed ions there was also the option to ask questions that might arise go the interview (1 mark) related to plan (2 marks) structured interview was used so participants had the flexibility so the interview was used (1 mark) related to plan (2 marks).	
11(c)(ii)	Explain <u>o</u> study.	ne weakness with conducting face-to-face interviews in your	2
	Award 2 m	s must use the face-to-face interview technique stated in (a) . narks: weakness is given and applied to the plan nark: weakness is given without being applied to the plan	
	intervi partici intervi	o-face might result in answers which are not truthful because the lewer can see the interviewee (1 mark) related to plan (2 marks) ipants need to travel or the interviewer needs to travel for the lew to take place which takes time and increases costs (1 mark) d to plan (2 marks)	

Question	Answer	Marks
11(c)(iii)	Explain one reason for your choice of sampling technique.	2
	Candidates must use the sampling technique stated in (a) Award 2 marks: reason is given and applied to the plan Award 1 mark: reason is given without being applied to the plan	
	 e a random sample was chosen so everyone in the target population has an equal chance of participating (1 mark) related to plan (2 marks) e an opportunity sample was chosen because large numbers can be 	
	 obtained relatively more easily than other methods (1 mark) related to plan (2 marks) a volunteer sample was chosen because people are willing and more likely to participate; (1 mark) related to plan (2 marks). 	

		Marks
Plan a study using an interview to investigate effect of rapid rotation shiftwork on the health of workers. Your plan must include details about:		10
The specific features of the plan should include: • interview technique (telephone or face-to-face) • interview format (structured, unstructured, semi-structured). • question format (open and/or closed) • examples of questions • question scoring/interpretation • number of questions	The general features of the plan should include (if appropriate): sample and sampling technique ethical guidelines a procedure a location type of data, analysis of data, use of descriptive statistics an aim or hypothesis (directional or non-directional)/null hypothesis steps for making the study valid and reliable	
plar	interview technique (telephone or face-to- face) interview format (structured, unstructured, semi- structured). question format (open and/or closed) examples of questions question scoring/interpretation number of questions	interview technique (telephone or face-to- face) interview format (structured, unstructured, semi- structured). question format (open and/or closed) examples of questions question scoring/interpretation include (if appropriate): sample and sampling technique ethical guidelines a procedure a location type of data, analysis of data, use of descriptive statistics an aim or hypothesis (directional or non-directional)/null hypothesis steps for making the study valid and reliable

Question		Answer	Marks	
12(b)	For one p	For one piece of psychological knowledge on which your plan is based:		
12(b)(i)	Describe this psychological knowledge.			
		4.4.2 design of work: shiftwork: rapid rotation and slow rotation, onexi-time including definitions and examples of each.		
	Effects of (1992).	shiftwork on health and accidents, including a study, e.g. Gold et al.		
	pm), 2 late rota: work	on: rapid rotation shifts (i) Metropolitan rota: work 2 early (6 am to 2 e (2 pm to 10 pm), 2 night (10 pm to 6 am), 2 rest; (ii) Continental 2 early, 2 late, 3 night; 2 rest, 2 early, 3 late; 2 night, 2 rest, 3 early; ight, 3 rest.		
	particularl pregnancy mortality of	(2003): shift work is associated with specific pathological disorders, y peptic ulcer disease, coronary heart disease and compromised y outcome. There is no evidence to suggest that shiftwork affects or cancer. Gastrointestinal disorders (peptic ulcer disease) are more n shift-workers than in day workers.		
		idents are not relevant Gold et al. study: Rotating shift work, sleep, ents related to sleepiness in hospital nurses).		
	Marks	Description		
	3–4	The knowledge is appropriate. Relevant points are correctly described in good detail.		
	1–2	Basic points are identified with some elaboration and understanding. The answer lacks detail (a sentence or two).		
	0	No creditable response		

Question		Answer	Marks
12(b)(ii)	Explain h plan your	ow you used <u>two</u> features of this psychological knowledge to study.	4
		es should explain how the psychological knowledge described in informed their plan in part (a) . For each feature:	
	Marks	Description	
	2	Suitable answer that relates a feature and explains how the feature was used, expanded or modified to make it appropriate to the plan. The knowledge has clearly been applied to the plan.	
	1	Basic answer that identifies a feature	
	0	No creditable response	
	Note	1 mark for explanation of follow on from (b)(i) ; 1 mark for explanation appearing in (a) ×2	
	or a contir	Participants can be asked about whether their shift is a metropolitan nental shift rota. They can then be asked whether they have suffered d treatment for disorders such as a peptic ulcer.	
12(c)(i)	Explain <u>o</u>	ne reason for your choice of question scoring/interpretation.	2
		es must use the choice of question scoring/interpretation stated in	
		narks: reason is given and applied to the plan nark: reason is given without being applied to the plan	
	 a yes, comp quant analys marks as the agree the ar 'conve 	point) scale was used because each participant's could express the ent of agreement/disagreement (1 mark) related to study (2 marks). In was used because each participant's response could be ared (1 mark) related to study (2 marks). Itative data was gathered because it allowed statistical sis/production of descriptive statistics (1 mark) related to study (2 ss). In a data is qualitative, a number of judges/raters were used to reach sement on the words produced (1 mark) related to study (2 marks) in swers gave qualitative data so was coded by raters/judges to cert' into quantitative data for statistical analysis (1 mark) related to (2 marks)	

Question	Answer	Marks
12(c)(ii)	Explain one weakness of your choice of question scoring/interpretation.	2
	Candidates must use the choice of question scoring/interpretation stated in (c)(i) Award 2 marks: weakness is given and applied to the plan Award 1 mark: weakness is given without being applied to the plan	
	 a different [e.g.3 or 7] point scale should have been used rather than the [e.g. 5] point used because the range of answers was too narrow/too wide (1 mark) related to study (2 marks) a forced/fixed choice point scale should have been used (e.g. 4 point) because many participants opted for the middle/neutral answer on my [5 point] scale (1 mark) related to study (2 marks) the raters/judges interpreting the answers may not agree leading to false findings (1 mark) related to study (2 marks) only one person gathered the answers and they might have some bias toward the outcome of the study (1 mark) related to study (2 marks) 	
12(c)(iii)	Explain one reason for your choice of interview format.	2
	Candidates must use the interview format stated in (a). Award 2 marks: reason is given and applied to the plan Award 1 mark: reason is given without being applied to the plan Example: a structured interview was used so all participants received the same questions (1 mark) in the same order (1 mark) related to plan (2 marks). a semi-structured interview was used so although there were fixed questions there was also the option to ask questions that might arise during the interview (1 mark) related to plan (2 marks) an unstructured interview was used so participants had the flexibility so could answer in any way they pleased (1 mark) related to plan (2 marks).	