Mark Scheme

Question			Answer/Indicative content	Marks	Guidance
1	a		**From Moray's (1959) study into auditory attention:** **Describe how <u>one</u> control was used in this study.** <u>Possible answers:</u> In *all* tasks (1) the apparatus used was the *same* type of (Brenell Mark IV stereophonic) *tape recorder* (1) used for each participant (1) Before each experiment (1) *all* participants (1) shadowed the *same* passages. (1) *All* passages throughout the study (1) were recorded by the *same male* speaker (1) heard by all participants (1) In Experiment 1, the *word list* (1) was repeated *35 times* (1) for *each* participant. (1) The volume was the same (1) in both headphones (1) for the rejected and shadowed message (1) Other appropriate controls should be credited.	3	**3 marks** - A clear and accurate description that includes: • Identification of a control. *(what)* • Identifies that *all* participants experienced this control. *(who)* • Identifies how this control was carried out. *(how)* **2 marks** - A reasonable description that refers to two of the features listed above, e.g. in *all* tasks the *same* apparatus was used. **1 mark** - A vague answer that only refers to one of the features listed above, e.g. participants shadowed the *same* passage. **0 mark** - No creditworthy information. i.e instructions were given <u>Examiner's Comments</u> Most candidates were able to identify the control and give either a clear or reasonable description of how it operated within Moray et al.'s study. The most common error made on this question was candidates missing how the control was carried out, for example writing 'The volume was the same in both headphones', but missing 'for the shadowed and rejected message'. This omission gave a reasonable description taking away the clarity of how it was carried out.

Mark Scheme

Question			Answer/Indicative content	Marks	Guidance
	b		**From Moray's (1959) study into attention in dichotic listening:** **Outline <u>one</u> conclusion Moray (1959) made in relation to attention.** <u>Possible answers:</u> Almost none of the verbal content of a rejected message is able to penetrate an attentional block (1) There was no trace of material from the rejected message being recognised (1) This study found that attention is selective (1) because participants were unable to recall information they were not focusing on unless it was subjectively important to them. (1) Moray concluded that information is only processed if it seen as relevant (1) for example, participants were more likely to attend to an instruction if their name preceded it. (1) The study found that most information around us is not processed or paid attention unless it is deemed relevant. (1) Participants were unable to recall information if they did not consider it important to them. (1) Subjectively important messages can penetrate an attentional block (1) as participants heard instructions if their own name was a part of the rejected message (1) Other appropriate outlines should be credited.	2	**2 marks** - A clear and accurate description that: • Gives a conclusion (Outlines that attention is selective/information only processed if deemed relevant) • Links to a finding from Moray's study. **1 mark** - A vague or partial answer, e.g. attention is selective, i.e. no supporting evidence/not contextualised. **0 mark** - No creditworthy information i.e. findings stated without conclusion <u>Examiner's Comments</u> A common mistake made by candidates on this question was giving unsupported conclusions. Many did not gain the second mark by giving a brief statement of what could be concluded from the study without linking to a finding of Moray et al.
			Total	**5**	

Mark Scheme

Question			Answer/Indicative content	Marks	Guidance
2			**Explain why Grant et al.'s (1998) study into context-dependent memory can be placed in the cognitive area.** Most likely answers: *Knowledge of Cognitive area*: The cognitive area assumes that behaviour can be largely explained in terms of information processing so behaviour such as memory has a cognitive basis. (1) *Finding from Grant et al*: Grant found that memory was influenced by the environmental context of noisy or silent conditions (1) *Links Grant et al's study to the cognitive area*: Therefore, the same environmental context can have a positive effect on performance of memory (1)	3	**3 marks** - A clear and accurate explanation that: • Shows an understanding of the cognitive area. • Findings from Grant et al.'s study. • Links Grant et al's study to the cognitive area. **2 marks** - A reasonably accurate explanation that refers to two of the above. **1 mark** - A vague or partial answer, e.g. a mere description of the cognitive area with no supporting evidence from Grant et al.'s study. **0 mark** - No creditworthy information. Examiner's Comments Candidates who missed out on full marks did not show an understanding of the cognitive area or did not link Grant et al.'s study clearly to the assumption/principle made.  **Misconception** This question required candidates to show an understanding of the cognitive area by referring to an assumption or principle e.g. 'behaviour can be largely explained in terms of information processing'. This area was often confused with the biological area with some candidates referring to 'brain processes.'
			Total	3	

Mark Scheme

Question			Answer/Indicative content	Marks	Guidance
3			C		three Examiner's Comments A significant proportion of candidates chose the option B - two conditions, which is incorrect. Misconception There were three conditions (hit, smashed and control group) in the second experiment.
			Total	1	
4			D		memory of words
			Total	1	

Mark Scheme

Question			Answer/Indicative content	Marks	Guidance
5	a		**Explain how Loftus and Palmer's (1974) study into eyewitness testimony links to the key theme of memory.** Likely answers: *Memory:* • Memory refers to an individual's ability to (accurately) recall/remember past events and information. *How memory accuracy was tested by Loftus and Palmer:* • In two experiments participants were tested to see the effects of verb use on memory. • In Experiment 1 the leading question related to verbs used in relation to the speed at which cars were travelling when they crashed/in Experiment 2 the leading question related to whether or not participants recalled seeing broken glass at the scene of a car crash. • They conducted two experiments to see whether verbs - in relation to speed and in relation to seeing broken glass - influenced the accuracy of memory. *What Loftus and Palmer found in relation to the key theme of 'memory':* • Results of both experiments showed that leading questions could have a negative effect on memory. • Two kinds of information go into an individual's memory for a complex occurrence: information gathered during the perception of the original event and post-event information.	3	**3 marks -** A clear and accurate response which shows: • An understanding of the term 'memory'. • How memory accuracy was tested by Loftus and Palmer (e.g. reference to use of verbs/ broken glass). • What Loftus and Palmer found in relation to the key theme of 'memory'. **2 marks -** An answer which address at least two of the above points. **1 mark -** A partial or vague answer which addresses at least one of the above points or is an uncontextualised answer, e.g., Loftus and Palmer tested to see if external information supplied after the perception of the original event could affect memory (no contextualisation). **0 mark -** No or incorrect answer. Examiner's Comments This question required three parts in the response: an understanding of the term 'memory,' how memory accuracy was tested in Loftus and Palmer's study and what Loftus and Palmer found in relation to 'memory.' Most candidates were able to explain how memory accuracy was tested but neglected to explain memory or express what Loftus and Plamer found in relation to 'memory.'

Mark Scheme

Question			Answer/Indicative content	Marks	Guidance
	b		Outline <u>two</u> controls used in Grant *et al.*'s (1998) study into context-dependent memory. <u>Possible controls include:</u> ◦ Every participant was asked to study the ***same*** (two-page, three-column) article (1) on ***psychoimmunology*** (1). ◦ Every participant received the ***same*** (1) (*sixteen*) ***multiple-choice questions*** (in the **Recognition Test**) (1). ◦ The (*ten*) ***short-answer test*** (derived from the multiple-choice questions for the Recognition Test) (1) were the ***same*** for each participant (1). ◦ The order of the questions on each test ***always*** followed the order in which the points were made (1) in the ***psychoimmunology*** text (1). ◦ The ***multiple-choice (Recognition Test)*** (1) was ***always*** taken second (1). ◦ The **short-answer test** ***(Recall Test)*** (1) was ***always*** taken first (1). ◦ ***All*** participants (1) wore **headphones** (1). • Other appropriate answer.	4 [2+2]	<u>For each control:</u> **2 marks -** A clear, contextualised answer. **1 mark -** A partial or uncontextualised answer, e.g. Every participant was asked to study the same article, i.e. no context. **0 mark -** No or incorrect answer. <u>Examiner's Comments</u> Most candidates performed well on this question. However, a few did not gain any marks because they had not demonstrated any understanding of the word control (e.g. same, all, every, always, standardised, each participant). Many made appropriate reference to controls such as the fact all participants wore headphones and they all read the same article on psychoimmunology.
			Total	7	

Mark Scheme

Question			Answer/Indicative content	Marks	Guidance
6	a		In Grant et al's (1998) study on memory why was the short-answer test taken before the multiple-choice test? To ensure that the information being recalled was from the reading of the text not recalled from the multiplechoice test	2 (AO1)	**1 mark:** MCQ being used in recall/ impact MCQ could have on answer **1 mark:** recall of reading the text/ memory of the article/ elaboration of why this is an issue Examiner's Comments This question elicited many good responses with candidates reasoning why the multiple-choice questions were second and the short-answer test first. The minority of candidates did not always elaborate well on why this was an issue to be considered in this study.

Mark Scheme

Question			Answer/Indicative content	Marks	Guidance
	b	i	**Explain one difference between Experiment 1 of Moray's (1959) study into attention and Simons and Chabris's study into inattention** Possible differences: • use of auditory data versus use of visual data • repeated measures vs independent measures design • different type of equipment used • number of conditions set up/independent variables • Sampling technique - Opportunity vs self-selected sampling	4 (AO1)	**4 marks** - for a clear response which; • identifies a difference • further outlines that difference • illustrates the difference with reference to Moray's study (Experiment 1) • illustrates the difference with reference to Simon and Chabris' study. **3 marks** for a vague response with the all of the above points or for a clear response with three of the points. **2 marks** for a vague response with three of the above points or for a clear response with two of the points. **1 mark** for a vague response with two of the above points or for a clear response with the difference identified/implied. **0 mark** - no creditworthy response. Max 3 marks if it is not clearly linked to experiment 1 of Moray. Do not credit differences that pertain to the aim, key theme or area of psychology. <u>Examiner's Comments</u> The minority of candidates were well prepared for this type of question and approached it in a formulaic way by making a clear comparative point and then outlining relevant information from each study to evidence. Successful candidates demonstrated a clear understanding of the two studies and were able to further outline the difference given. The candidates who were less successful, did not identify valid comparison points (e.g., talked about the research aims) and without this were unable to access any further marks.

Mark Scheme

Question			Answer/Indicative content	Marks	Guidance
		ii	**Explain one similarity between Experiment 1 of Moray's (1959) study into attention and Simons and Chabris's study into inattention** Possible similarities: • use of experiment/manipulation of IV • use of laboratory/controlled environment • standardised procedures • undergraduates as participants • use of quantitative data	4 (AO1)	**4 marks** - for a clear response which; • identifies a similarity • further outlines that similarity • illustrates the similarity with reference to Moray's study (Experiment 1) • illustrates the similarity with reference to Simon and Chabris' study. **3 marks** for a vague response with the all of the above points or for a clear response with three of the points. **2 marks** for a vague response with three of the above points or for a clear response with two of the points. **1 mark** for a vague response with two of the above points or for a clear response with the similarity identified/implied. **0 mark** - no creditworthy response. Max 3 marks if it is not clearly linked to experiment 1 of Moray. Do not credit similarities that pertain to the aim, key theme or area of psychology <u>Examiner's Comments</u> As with Question (4)(b)(i), some candidates were very prepared for this type of question identifying a clear similarity and then outlining relevant information from each study to evidence. Successful candidates demonstrated a clear understanding of the two studies and were able to further outline the similarity given. The candidates who were less successful did not identify valid comparison points relating to Experiment 1 of Moray (e.g., referred to independent measures design as the similarity: used in Experiment 2).
			Total	10	

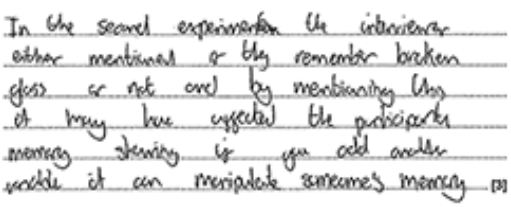
Mark Scheme

Question			Answer/Indicative content	Marks	Guidance
7	a		Participants in Grant et al.'s (1998) study into context-dependent memory completed two types of test. Identify which <u>one</u> of these types of tests was completed first. Short-answer or recall test.	1	**1 mark** – A correct answer. **0 mark** – No or incorrect answer. <u>Examiner's Comments</u> Only a minority of candidates were able to provide the correct response. The most common incorrect response was the multiple-choice test/recognition test suggesting candidates have misunderstood that the focus of the question was which test was completed first or they did not know the order of the two tests. A few candidates stated features of the correct response (open questions, questionnaire) or stated a test from a different core study and therefore did not respond correctly to the question.

Mark Scheme

Question			Answer/Indicative content	Marks	Guidance
	b	i	**Outline why Loftus and Palmer conducted their (1974) experiments into eyewitness testimony.** Likely answers: • They conducted their experiments to investigate the effects of leading questions - information introduced after the event - on how accurately events were remembered. The researchers wanted to find out if changing the wording of a question describing how fast cars were travelling when involved in a crash would affect how participants perceived or remembered the event.	3	**3 marks –** A clear, well-described outline such as the one given, which must contain reference to **both** the effect of leading questions and influenced/distortion on/of memory, and includes precisely contextualised supporting detail (from either or both experiments). **2 marks** – An outline which contains references to **both** the effect of leading questions and influence/distortion on/of memory (may or may not contain limited supporting contextual detail from the study, e.g. verb) OR An outline which contains references to **either** the effect of leading questions **OR** influence/distortion on/of memory **AND** contains limited supporting contextual detail from the study (e.g. verb). **1 mark** – A partial or uncontextualised answer, e.g. The experiments looked at the effect of leading questions. **0 mark** – No or incorrect answer. Examiner's Comments The candidates who scored well on this question provided an outline containing references to the effect of leading questions and the influence/distortion on memory, and then went on to support their response with supporting details from Loftus and Palmer. The majority of candidates scored 2 marks by referring to leading questions and memory without contextualising their response to Loftus and Palmer.

Mark Scheme

Question			Answer/Indicative content	Marks	Guidance
		ii	**Describe how the independent variable (IV) was manipulated in Loftus and Palmer's (1974) second experiment into eyewitness testimony.** Likely answers: • (Through the wording in the questionnaire) one group was asked, 'About how fast were the cars going when they smashed into each other?', one group was asked, 'About how fast were the cars going when they hit each other?', a third group was not asked about speed. • One group was asked a question about speed using the verbs 'smashed', another group was asked a question about speed using the verb 'hit', a third group was not questioned about speed. • Other appropriate answer.	3	**3 marks –** A correct reference is made to all three conditions, i.e. smashed, hit, no verb. **2 marks –** A correct reference is made to only two of the conditions. **1 mark –** A correct reference is made to only one of the conditions, each group was asked either a different question or no question at all (no real context) or each group had an altered verb in the question (with limited context). **0 mark –** No or incorrect answer. Examiner's Comments The candidates who performed well on this question recognised it was focused on Loftus and Palmer's second experiment and then described the three verb conditions: smashed, hit and no leading question asked. The minority of candidates were referring to the first experiment in their response, so candidates needed to take care when reading questions. The minority of candidates discussed the 'broken glass' question as the focus of their response which gained 0 marks. Stating 'a control group' was not enough as it needed to be described. Exemplar 1  In the second experiment the interviewer either mentioned or they remember broken glass or not and by mentioning this it may have effected the participants memory showing if you add another variable it can manipulate someone's memory Exemplar 1 highlights the confusion some candidates were having with the 'broken glass' element of the study, which is the dependent variable not the independent variable. This candidate has then attempted a conclusion for the experiment but this is also not a requirement of the question. This exemplar demonstrates how the minority of candidates missed that the focus of this question was the independent variables in Loftus and Palmer's second experiment.

Mark Scheme

Question			Answer/Indicative content	Marks	Guidance
			Total	7	

Mark Scheme

Question			Answer/Indicative content	Marks	Guidance
8			**Describe the Loftus et al study into memory and briefly explain how it relates to this article.** Possible key features for description of study: • Background to study • Aims and hypotheses • Design • Sample • Procedure • Materials • Key findings • Conclusions drawn NB Candidates can refer to both experiments or one of the experiments when describing this study. How the study relate to the article: • Human memory is not reliable/accurate/detailed • Memory is constructive	7(5 + 2)	For description of the study using one experiment: **5 marks** for a detailed and accurate description which identifies most of the key features of the study. **3–4 marks** for an accurate description which identifies most of the key features of the study. **1–2 marks** for a brief or vague description of the study which identifies some key features. **0 marks** – no creditworthy response. For description of the study using both experiments: **5 marks** for an accurate description which identifies most of the key features of each experiment. **3–4 marks** for an accurate description which identifies some of the key features of each experiment but where there may be an imbalance (more detail on one experiment or the other) **1–2 marks** for a brief or vague description of the two experiments. 0 marks – no creditworthy response. For application to the article; **2 marks** a relevant link which is clearly, if briefly, explained. **1 mark** for a clear link or for one which is not well explained **0 marks** – no creditworthy response. Examiner's Comments Many candidates were able to give good accounts of the Loftus and Palmer study but these did vary in terms of accuracy rather than detail. The best responses took extracts from the article and made direct references back to the findings and conclusions of the study.

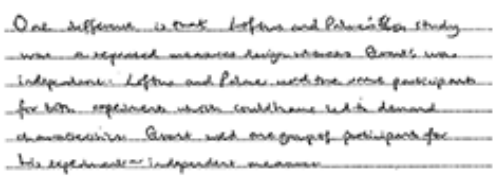
Mark Scheme

Question			Answer/Indicative content	Marks	Guidance
			Total	7	

Mark Scheme

Question	Answer/Indicative content	Marks	Guidance
9	**Describe <u>one</u> difference between Loftus & Palmer's study of eye witness memory and Grant et al.'s study of contextual cues in memory.** Possible differences: • Stimulus used: video clip versus reading material • Only one DV in each of Loftus & Palmer's experiments but two in Grant et al.'s. • Loftus & Palmer only investigated the disruption to memory whereas Grant et al. also investigated enhancement. • Loftus & Palmer collected data through self-report whereas Grant et al. used a test they scored themselves. • Grant et al.'s study had more ecological validity than Loftus & Palmer's staged automobile accidents	4	**4 marks** – for a clear response which; • identifies a difference • further outlines that difference • illustrates the difference with reference to Loftus & Palmer's study • illustrates the difference with reference to Grant et al.'s study. **3 marks** for a vague response with all the above points or for a clear response with three of the points. **2 marks** for a vague response with three of the above points or for a clear response with two of the points. **1 mark** for a vague response with two of the above points or for a clear response with the difference identified/implied. **0 marks** – no creditworthy response. **NB** Reference to a difference in relation to the aims of the studies gains no credit. <u>Examiner's Comments</u> Many candidates were unable to identify an accurate difference between Loftus and Palmer and Grant et al.'s study. Candidates needed to identify an appropriate difference, needed to develop the difference and evidence the difference in relation to the two named studies. Some differences were inappropriate – their aims, sampling method. Some responses given were not differences but were in fact similarities between the studies – independent measures design, laboratory experiments.  **Assessment for learning** Centres should focus on highlighting specific details of the **methodology** that each pair of core studies has in common and how they are different. For example, candidates should be able to identify the experimental design of each study and practise explaining this with reference to each core study.

Mark Scheme

Question			Answer/Indicative content	Marks	Guidance
					Exemplar 1  Exemplar 1 demonstrates how the candidate has used experimental design as a difference between the pair of core studies when in fact it is a similarity as they both used an independent measures design.
			Total	4	

Mark Scheme

Question			Answer/Indicative content	Marks	Guidance
10			**Outline the procedure used in Experiment 1 of Moray's study into attention.** Features of the procedure: • A short list of simple words was repeatedly presented to one of the participant's ears whilst they shadowed a prose message presented to the other ear. (The word list was faded in after shadowing had begun, and was equal in intensity to the shadowed message. At the end of the prose passage it was faded out so as to become inaudible as the prose finished.) • The rejected message (word list) was repeated 35 times. • The participant was then asked to report all he could of the content of the rejected message. • S/he was then given a recognition test using similar material, present in neither the list nor the passage, as a control. • The gap between the end of shadowing and the beginning of the recognition test was about 30 seconds. • Use of repeated measures design.	4	**1 mark** for reference to shadowed (prose) message in one ear **1 mark** for reference to rejected (word list) message in other ear **1 mark** for recall or recognition task **1 mark** for any other relevant detail from the procedure **0 marks** – no creditworthy response Examiner's Comments Most candidates gained marks here and correctly focused on procedure rather than other details of Experiment 1. Many were able to outline the key features of the shadowed prose and rejected list of words albeit with differing degrees of clarity. Common errors were to outline one of the other experiments or to outline Grant et al's study.
			Total	4	

Mark Scheme

Question			Answer/Indicative content	Marks	Guidance
11	a	i	Explain **one** way in which the procedure of Grant *et al*"s (1998) study into memory increased the reliability of the research. Possible answers: • same background noise within condition • headphones worn for both conditions • all participants read the same article • tests for recall were the same • order of testing was the same • break between study and test phase was about 2 minutes each time <u>Example of 1 mark answer</u> The break between study and testing was about the same time each trial. <u>Example of 2 mark answer</u> All participants read with headphones on (1) to ensure consistency in experience (1). <u>Examples of 3 mark answer</u> Standardisation was used (1) where experimenters used the same article on psychoimmunology (1) to ensure that what participants had to learn was not an extraneous variable affecting recall (1). The experimenters used an article on psychoimmunology (1) which was published and accessible to anyone (1) so that the study could be easily replicated to establish reliability (1).	3	**3 marks** for a clear response which outlines what is meant by reliability (e.g. consistency or replicability), identifies how this is achieved in study, and then applies specifically to this study through example. **2 marks** for a vague response with all three of the above features or for a clear response with two of the features. **1 mark** for identifying a relevant way the procedure addressed the issue of reliability.

Mark Scheme

Question			Answer/Indicative content	Marks	Guidance
		ii	**Outline one conclusion that was drawn from this study.** Possible answers: • There are context-dependency effects for newly learned meaningful material regardless of whether a short-answer test or a multiple-choice test is used to assess learning. • Studying and testing in the same environment leads to enhanced performance in recall through access to relevant cues. • Students are likely to perform better in exams if they study for them with a minimum of background noise because, although there was no overall effect of noise on performance, the fact that there was evidence for context-dependency suggests they are better off studying without background noise as it will not be present during actual testing.	2	**2 marks** for a clearly identified and relevant conclusion arising from the study. **1 mark** for a vague, brief or muddled conclusion arising from the study. **0 marks** – no creditworthy response.
	b	i	**Outline the apparatus used in Moray's (1959) study into attention.** Possible answer: A (stereophonic) tape recorder (modified) with two amplifiers to give to independent outputs going into either earpiece on a pair of headphones.	2	**2 marks** for a full description of the apparatus which details the three components that allowed for dichotomous messages **1 mark** for partial and / or largely accurate description ofthe apparatus. **0 marks** – no creditworthy response

Mark Scheme

Question			Answer/Indicative content	Marks	Guidance
		ii	**Outline one weakness of using an experimental method in this study.** Possible weaknesses can apply to the experimental method or the laboratory experiment specifically e.g. lack of external validity, artificiality of task / setting, low construct validity, potential for demand characteristics. Example of 1 mark answer The method lacks ecological validity (1). Example of 2 mark answer The method lacked ecological validity (1) because it is unrealistic to have two messages relayed in such a controlled way (1). Experiments have low construct validity (1) as the dependent variable – in this case, the number of words correctly recognised in a message – is a very narrow measure of the process of attention (1).	2	**2 marks** for a clearly identified and relevant weakness which is appropriately applied to the study. **1 mark** for identifying a relevant ethical weakness either explicitly, or implicitly through application to the study. **0 marks** – no creditworthy response.
			Total	9	

Mark Scheme

Question			Answer/Indicative content	Marks	Guidance
12		i	**Simons and Chabris (1999) used an independent measures design in their study on attention.** **Explain how the design was used in this study.** Possible answer: Participants were only allocated to one of four conditions (1) varying between whether an umbrella or gorilla used and whether this was in opaque or transparent conditions (1).	2	**2 marks** for demonstrating knowledge of an independent measures design and for applying this to the conditions used in the study. **1 mark** for demonstrating knowledge of an independent measures design either explicitly, or implicitly through application to the study. **0 marks** – no creditworthy response. *Accept reference to 4 or 16 conditions *Candidates do not need to outline all conditions of the study but they must make it clear through their answer that they understand there were different groups being compared e.g. those who saw a gorilla versus an umbrella, or those in the opaque condition versus transparent condition.
		ii	**Outline two weaknesses of using an independent measures design in this study.** Possible weaknesses: Participant variables, more participants need to be recruited compared to repeated measures. <u>Example of a 4 mark answer</u> One weakness is the number of participants that need to be recruited (1). In this study they had four conditions and had to recruit separate participants for each condition and this could mean the research takes longer to conduct (1). Another weakness is the effect of participant variables on findings (1) as the difference between conditions could be do with the cognitive abilities of individual participants rather than the different situations that had been set up (1). NB Other appropriate responses should be credited.	2 + 2	**2 marks** for each clearly identified and relevant weakness which is appropriately applied to the study. **1 mark** for identifying a relevant weakness either explicitly, or implicitly through application to the study. **0 marks** – no creditworthy response.
			Total	**6**	

Mark Scheme

Question			Answer/Indicative content	Marks	Guidance
13			B laboratory experiment using a mixture of repeated measures and independent measures design	1	
			Total	1	

Mark Scheme

Question			Answer/Indicative content	Marks	Guidance
14		i	**Explain one weakness of the type of data collected in Loftus & Palmer's (1974) study into eye witness testimony.** Possible answer: Because the data was quantitative (1) there is a risk that it suggests similarity in response when there may not be (1) so for example a mean estimate of speed does not tell us whether certain individuals' estimates were similar across conditions (1). NB Other appropriate responses should be credited.	3	**3 marks** for a clear answer which; • identifies the data is quantitative or similar • identifies a weakness of quantitative data • identifies this weakness in the context of the study **2 marks** for an answer which addresses at least two of the above points. **1 mark** for a partial or vague answer which addresses at least one of the above points. **0 marks** – no creditworthy response. No credit for use of qualitative data.
		ii	**Outline one conclusion that was drawn from this study.** Possible answers: • The verb used in a question influences a participant's response i.e. the way a question is phrased influences the answer given. • People are not very good at judging vehicular speed regardless of the situation they find themselves in. • Misleading post event information can have a distorting effect on an individual's memory. Information gleaned during the perception of the original event and the post-event information integrate over time to affect memory. <u>Example of a 1 mark answer:</u> 'leading questions affected memory', 'eye witness testimonies are unreliable'.	2	**2 marks** for a clearly identified and relevant conclusion arising from the study. **1 mark** for a vague, brief or muddled conclusion arising from the study. **0 marks** – no creditworthy response. No credit for just findings.
			Total	**5**	

Mark Scheme

Question			Answer/Indicative content	Marks	Guidance
15			**Explain how Grant et al.'s study into context-dependent memory can be considered useful.** Answers could refer to: • The concept that if an individual is asked to recall information in the same situation as it was first received, their memory can be enhanced and this is useful as it leads to individuals remembering information more accurately (1). Grant et al.'s study showed that studying and testing in the same environment can lead to enhanced performance, particularly if the learning and recall are both effected in silent conditions (1]) This could be very useful for both teachers and students who could do their best to learn and study in quiet environments as, when under examination conditions they will be asked to recall what they have learned in silence (1). • The concept that if an individual is asked to recall information in the same situation as it was first received, their memory can be enhanced and this is useful as it leads to individuals remembering information more accurately (1). Grant et al.'s study showed that studying and testing in the same environment lead to enhanced performance (1). This could be useful for the police when asking eyewitnesses to recall information relating to a crime they had witnessed as they can either ask the witness to imagine the crime scene/take them to the crime scene itself as re-establishing the original environment may lead to more accurate recall and evidence statements (1). Other appropriate answer.	3	**3 marks** for a clear and accurate response which demonstrates both knowledge and understanding of Grant et al.'s study, and how the findings can be useful. **1-2 marks** for a brief or vague response which shows some knowledge and understanding of Grant et al.'s study and makes some attempt to show how findings could be useful. No more than 1 mark can be gained if the answer has no contextualisation. **0 marks** – no creditworthy response.
			Total	3	

Mark Scheme

Question			Answer/Indicative content	Marks	Guidance
16	a		**Name the experimental design used in Loftus & Palmer's study into eye witness testimony.** Answer: Independent measures/independent groups.	1	**1 mark** for correctly naming the design. **0 marks** – no creditworthy response e.g. independent.
	b		**Outline one weakness of the way the sample was organised in Loftus and Palmer's first experiment.** Examples of a 1-mark answer: The way the sample was organised mean the results could lack validity because different participants were used in each condition so individual differences may have affected the results (1). (No context) Different participants were used in each condition so individual differences may have affected results (1). (No context) Examples of 2-mark answers: The results may lack validity because different participants were used in each of the conditions - (smashed, collided, hit, contacted and bumped (1) - so individual differences may have affected the results (1). Different participants were used in the five speed conditions so one may not be comparing participants with the same driving experiences (1) which could have influenced their ability to estimate speed (and therefore the validity of the results) (1). Other appropriate answer – must refer to the way the sample was organised.	2	**2 marks** for a clearly identified and relevant weakness of the way the sample was organised which is appropriately applied to the study i.e. contextualised. **1 mark** for identifying a relevant weakness of how the sample was organised, not contextualised to the study. **0 marks** – no creditworthy response e.g. any references to possible weaknesse
			Total	3	

Mark Scheme

Question			Answer/Indicative content	Marks	Guidance
17			A detection of 'gorilla'	1	Examiner's Comments A number of candidates were unable to give correct response to this knowledge based question on operationalising a dependent c=variable in the core study. D was given wrongly as a response by quite a number of candidates.
			Total	1	

Mark Scheme

Question			Answer/Indicative content	Marks	Guidance
18	a		**Outline one strength of the type of data collected in Moray's study into attention.** Possible strengths: • Strength of using quantitative data e.g. easy to identify patterns, make reliable comparisons, more objective than qualitative data • Strength of using means e.g. most powerful measure of central tendency, full data set used in analysis Examples of 2 mark answers Use of quantitative data is a strength as comparisons can be made more easily (1) to see if there were any significant differences between recognition for words that had been presented differently (1). The strength of using numerical data is that it provides an objective measure (1) because a qualitative judgement of level of attention would be open to interpretation (1).	2	**2 marks** for a clearly identified and relevant strength described in the context of the study. **1 mark** for a vaguely contextualised strength or for a clear strength which has not been contextualised. **0 marks** – no creditworthy response. NB Do also credit strengths pertaining to the use of primary data and the use of means. Examiner's Comments Most candidates focused on quantitative data and were able to give an appropriate strength with ease of analysis being a popular response. Candidates found it more of a challenge to apply their stated strength to the Moray study. Many just quoted findings from the study which did not help to illustrate the strength.

Mark Scheme

Question			Answer/Indicative content	Marks	Guidance
	b		**Using Simons & Chabris' study into attention, explain one way in which the procedure would have increased the reliability of the research.** Possible answers: • use of written protocol for the experimenters • all participants tested individually • duration of unexpected event/whole video was the same • standardised production of video Example of 1 mark answer The unexpected event lasted for 5 seconds on all versions of the video. Example of 2 mark answer All participants were tested individually (1) to ensure consistency in measurement (1). Example of 3 mark answer Standardisation was used (1) where experimenters used the same written protocol (1) to ensure that participants did not receive different instructions which could have impacted on how consistent their perception of the video was (1).	3	**3 marks** for a clear response which identifies a relevant way the procedure's design increases reliability, outlines how/why it did (context) and demonstrates an understanding of reliability in the process. **2 marks** for a clear response with two of the above features or for a vague response with all three of the above features. **1 mark** for identifying a relevant way the procedure addressed the issue of reliability or for some understanding of the concept of reliability. **0 marks** – no creditworthy response. Examiner's Comments Most candidates recognised this as a cue to write about standardisation, and many were able to give accurate examples of how Simon & Chabris used standardisation in their study although some did refer to features of the study that changed rather than stayed the same. A few candidates could articulate how standardisation increases reliability, e.g. through making replication easier. It was this third mark that some candidates found it difficult to access.
			Total	5	

Mark Scheme

Question			Answer/Indicative content	Marks	Guidance
19	a		**From Loftus and Palmer's study on eyewitness testimony a laboratory experiment was used. Describe why Loftus and Palmer's study is considered a laboratory experiment** Example Answer: • Loftus and Palmer is considered a laboratory experiment because an **IV was manipulated – verb used in critical questions (smashed, collided, bumped, hit, contacted), a DV was measured – mph speed estimates and it was carried out in a highly controlled** environment. • IV's were manipulated – verb used when asked about speed – and mph speed responses were recorded in a controlled environment – all clips shown were the same length and shown in the same way to all p's. • Other appropriate response *Key features of a laboratory experiments are the manipulation of IV', and highly controlled conditions.*	2	**2 marks** – An accurate description given as to how Loftus and Palmer is a laboratory experiment as detailed in answer guidance **1 mark** – Partial of vague answer *e.g. it was highly controlled / there was a manipulation / it was highly controlled where participants watched the same film clips / verbs in the critical question were manipulated* **0 marks** – no credit worthy information *Describing purely how it was controlled does a give full understanding of what a laboratory experiment is (an observation may also be controlled) so some indication that variables were manipulated in a highly controlled environment is needed to full marks* *The question requires candidates explain their response in context of the study* Examiner's Comments Higher scoring responses were able to recognise the demand of the question and provided both elements of a laboratory experiment (manipulating the independent variable and controls) while also putting the context in from the Loftus and Palmer study. This question allowed candidates the ability to express their understanding of psychological research methods in the context of the core studies. Many candidates did not achieve full marks on this question by only identifying one feature.

Mark Scheme

Question			Answer/Indicative content	Marks	Guidance
	b		**Explain one weakness of using a laboratory experiment for this study** Possible answer: • One weakness of a laboratory experiment is low ecological validity. Participants watched controlled video clips of staged crashes and this would not represent how an incident is witnessed in real life • Demand characteristics may be high because the environment is artificial and the participants know they're in a study. This means they may not give an honest / true mph estimation as they may just give an answer they think is expected of them • Other appropriate response	2	**2 marks** – Weakness is identified and explained in context of Loftus and Palmer's study **1 mark –Weakness is identified / explanation lacking clarity) but is in context of the study OR** weakness is explained but not in context of the study *e.g. Low ecological validity so behaviour is not natural* **0 marks** – no creditworthy response *The question requires candidates explain their response in context of the study* *Demand characteristics may be high because the environment is artificial. This means participants may not give an honest / true answer as they may do what they think is expected of them – this is a 1 mark answer as it is not contextualised* Examiner's Comments The majority of candidates achieved full marks on this question as they were able to give a weakness of laboratory experiments in the context of the core study. Most candidates referred to the lack of ecological validity and went on to explain why that was a weakness in the context of watching video clips of staged crashes.
			Total	4	

Mark Scheme

Question			Answer/Indicative content	Marks	Guidance
20	a		From Loftus and Palmer's first experiment into eyewitness testimony: Identify the independent variable (IV) and the dependent variable (DV). Answer should include: • IV = the wording of the critical question which asked, "About how fast were the cars going when they smashed / collided/hit / contacted / bumped each other?"/ the verb used to describe the accident: smashed / collided/hit / contacted / bumped. [2 marks] • DV = the estimated (vehicular) speed (given by participants). [1 mark]	[3] [2+1]	3 marks – An accurate identification of the IV which must refer to both the critical question, and the content of the critical question (all five verbs) [2 marks] + the correct identification of the DV [1 mark] 2 marks – An accurate identification of the IV which must refer to both the critical question and the content of the critical question with no / an incorrect identification of the DV; the correct identification of the DV with a vague / partial IV. 1 mark – The mere identification of the DV; a vague / partial IV = the wording of the critical question. 0 marks – No creditworthy information e.g. the IV and / or the DV used in Experiment 2. • *To gain the full 2 marks for the IV, candidates must include reference to all five verbs (to prevent confusion with Experiment 2).* • *Accept 'leading question / verb/word used' instead of 'critical question'.* Examiner's Comments Generally, a well answered question. Weak candidates did however fail to fully identify the independent variable by including all five verbs, some referred to the verb 'crashed' instead of 'smashed', and a few confused the independent variable with the dependent variable.
	b		Identify the research design used in Grant et al.'s study into context-dependent memory • Independent measures / independent groups.	[1]	1 mark – Identification of the correct research design as given in the Answer Guidance. 0 marks – No creditworthy information e.g. repeated measures design, matched participants design, the research method. Examiner's Comments A well answered question.
			Total	4	

Mark Scheme

Question			Answer/Indicative content	Marks	Guidance
21	a		From Grant et al.'s study on context-dependent memory: Identify the type of data gathered. • Quantitative (performance on a short-answer recall test / a multiple-choice recall test) OR • Interval	1	1 mark – identification of the data type is identified as detailed in the answer guidance 0 marks – no creditworthy response Examiner's Comments Candidates answered this question well, with the majority of candidates gaining the mark.
	b		Outline one strength of collecting this type of data in this study. Possible Answer: • It would be easy to compare and analyse data gathered between the conditions – matching or mis matching – to see if memory was enhanced when the learning and recall environments were the same or not • Other appropriate response	2	2 marks – Response demonstrates good evaluation. Strength is outlined in context of Grant et al's study as detailed in the answer guidance 1 mark – Response demonstrates limited / basic evaluation. Strength partially outlined in context of the Grant et al study OR strength is outlined but not in context of Grant et al's study *e.g. the data is easy to compare and analyse between the conditions* 0 marks – no creditworthy response *The question requires candidates explain the strength in context of the study – if merely identified then only 1 mark can be awarded* Examiner's Comments The majority of candidates were able to provide an appropriate strength of quantitative data, however many candidates did not contextualise their responses. Many would state a generic strength, e.g. "It is easier to make comparisons between the conditions" and not go on to explain how this was a strength for Grant et al's study so could not gain the 2nd mark.
			Total	3	

Mark Scheme

Question			Answer/Indicative content	Marks	Guidance
22	a		From Loftus and Palmer's first experiment: Describe **one** way the information the participants received after viewing the traffic accidents influenced their memory. **[2]** **Ways memory was influenced;** • reconstruction of memory • response-bias **2 mark responses** • e.g. A subject is uncertain whether to say 30 mph or 40 mph and the verb *smashed* (1) biases their response (1) towards a higher estimate. • e.g. The verb *smashed* may distort a subject's memory (1) such that he 'sees' the accident as being more severe than it actually was and therefore estimates a higher MPH speed. (1) **1 mark responses** • e.g. participants gave higher speed estimates when questioned using the word 'smashed' • e.g. it caused memory bias	2	**2 marks –** Increasingly detailed and accurate way described about how information received after the traffic accidents can influence our memory as detailed in the answer guidance. **1 mark –** Partial or vague answer not fully described OR answer not linked to study. **0 marks –** No creditworthy response. *Only one of the ways is needed for full marks but the candidate must make it clear what effect the information has on memory.* *Context is needed for full marks; context = speed, mph, smashed verb, accident, etc. Referring to memory alone would not be appropriate contextualisation – Loftus and Palmer is not the only study looking at memory and memory is also in the question.* *Do check there is a clear reference to a cognitive process / concept before awarding full marks.* *If candidate refers to Experiment 2 (e.g. broken glass) rather than Experiment 1 this can still earn a mark if the general effect on memory is correct. However, the context will be wrong so both marks cannot be awarded.* Examiner's Comments Most candidates were able to state how the use of different verbs influenced speed estimates. However, only a small number were able to explain how memory had been influenced for this to happen (e.g. distortion of memory). Many did not address this part of the question at all. Of those that did, too many simply quoted what was in the question already (i.e. memory was influenced) rather than going beyond this. Some candidates wrote about the wrong experiment by referring to 'broken glass' - however, it did not stop them from earning the mark for explaining the cognitive processes behind participant responses.

Mark Scheme

Question			Answer/Indicative content	Marks	Guidance
	b		In Grant et al's study on context-dependent memory: Describe two ways the assess -ment of memory was standardised. **[4]Possible ways;** • same background noise in study context • same background noise in test context • same material studied • same multiple-choice questions • same short answer questions • order of memory tests was the same each time • standardised instructions • same duration of break between phases • all participants wore headphones 2 mark responses • e.g. All participants in the noisy condition (1) heard the same background noise (1) whilst studying the material to be memorised. • e.g. All participants were given the same to-be-studied material to memorise (1) - an article (1) on psychoimmunology. • e.g. Each participant had to wear headphones (1) in both the study and test phase. (1) • e.g. Every participant was asked the same sixteen multiple-choice (1) questions. (1) • e.g. The short answer test (1) was always administered first. (1) • e.g. Standardised instructions were used (1) making reference to a class project. (1) 1 mark responses • e.g. Every participant was asked the same questions • e.g. All participants wore headphones. • e.g. All participants' recall was tested in the same way.	4	2 marks – Accurate way that the assessment of memory was standardised is given as detailed in the answer guidance. 1 mark – Partial / vague answer OR answer not linked to study. 0 marks – No creditworthy response *Responses may refer to standardisation across conditions (e.g. same multiple choice questions given to all participants) or within conditions (e.g. every participant in the noisy condition heard same background noise)* *N.B. Participants did not wear exactly the same headphones so this is not a creditworthy example of standardisation.* <u>Examiner's Comments</u> The majority of candidates outlined two relevant controls which were clearly in the context of the Grant et al. study. A common error was to state that the time in which the article was read had been standardised.
			Total	6	

Mark Scheme

Question			Answer/Indicative content	Marks	Guidance
23	a		*From the study by Loftus and Palmer on eyewitness testimony, outline <u>two</u> ways in which the procedure was standardised.* <u>Examples of a 2 mark answer</u> • Participants watched same (1) film clip / s (1). • Participants were asked set (1) questions (1). • The time-lapse between viewing and questioning (1) was the same (1). • Each (1) participants was asked to give a general account of what they remembered (1). • The environment (1) was consistent (1) across both conditions. • All participants saw the film clip / s at the same (1) time (1). • All participants were given identical (1) instructions (1). • Other appropriate outlines should be credited.	[4] [2+2]	For each way; **1 mark** for identifying a variable in the study that was standardised *Plus* **1 mark** for showing knowledge of the standardisation through use of appropriately terminology e.g. same, all, etc. **0 marks –** No creditworthy information. <u>Examiner's Comments</u> Another well answered question with the vast majority scoring full marks. Candidates tended to lose marks not because they could not identified variables that were standardised but because they were not always explicit about how they were standardised.
	b		*To what extent does Grant et al.'s contemporary study into context-dependent memory change our understanding of the key theme of 'Memory'? Support your answer with examples from both Loftus and Palmer's and Grant et al.'s studies.* Possible answer: • Grant et al.'s study can be seen as adding to our understanding of how memory works because it investigates a different aspect of memory. Loftus and Palmer's study investigated reconstructive memory whereas Grant et al. investigated context-dependent memory. Both studies show that memory is very fragile and can be easily influenced by external factors. Loftus and Palmer's study showed that memory can be negatively influenced by the information we receive after and event in the form of leading questions e.g. participants who were asked the speed of the vehicles when they smashed into each other, on average, gave higher speed estimates than those who were asked how fast the vehicles were going when they hit each other. Grant et al.'s study	[5]	GOOD **Up to 3 marks** for considering the extent of change. The focus can be one argument in depth, or more than one argument in less depth. Either way the argument should be convincing and effective. *Plus* **1 mark** for applying an argument to the study by Grant et al. *Plus* **1 mark** for applying an argument to the study by Loftus & Palmer REASONABLE **3-4 marks for** a response which makes effective and convincing arguments about the extent of change but does not apply to the studies. OR For a response that makes reference to change but does use the studies effectively to show this. LIMITED **1-2 marks** for a simple change or no change is stated. AND / OR A change that is implied through the description of Grant et al.'s study. **0 marks –** No creditworthy information.

Mark Scheme

Question	Answer/Indicative content	Marks	Guidance
	showed that memory can be heavily influenced by context. Memory was negatively affected if participants were asked to recall information in a different environment to the one in which it was originally received, thus adding to our understanding of how memory can be influenced. Both Loftus and Palmer's and Grant et al. used students as participants and conducted their studies in American universities. Therefore, Grant et al.'s study does not really change or increase our understanding of memory in relation to people of other ages, occupations or cultures. As both studies were highly controlled laboratory experiments, they lack ecological validity. Therefore, Grant et al.'s study does not change our understanding of memory in relation to real-life situations. • Other appropriate evaluations / explanations should be credited.		*The question asks to what extent so candidates can argue that it does OR does not change our understanding. Some contemporary studies change our understanding more than others hence the command "to what extent."* *Full mark responses would make a judgement about the extent to which a change of understanding has occurred and support their argument with supporting evidence from both the named studies.* *NB It is feasible for a candidate to argue for a change in understanding without reference to Loftus & Palmer but this cannot earn full marks. Candidates do need to make reference to Grant et al's research (whether explicit or implicit) to earn any marks. This may include an explanation of how Grant et al have changed our understanding of memory without a reference back to Loftus & Palmer.* *2 marks can be given alone for the use of studies as long as it is clear what the comparison (change / no change) is from the descriptions given by candidates.* <u>Examiner's Comments</u> This was the question that candidates found most challenging in this section. There were some good efforts to compare to the two studies - either in terms of showing how understanding has changed or how it has not, or sometimes both. However, too many candidates relied on just outlining the two studies with no effort to make a link between them. This is despite a clear pairing of the studies within the specification and a clear instruction to consider how contemporary studies (like Grant et al.'s) have changed our understanding, if at all. Many candidates were not well prepared for this type of question.
	Total	9	

Mark Scheme

Question			Answer/Indicative content	Marks	Guidance
24	a		*From Moray's study into auditory attention:* *Describe the research method used in Experiment 2.* Possible features: • The location of the experiment i.e. laboratory or controlled environment • The experimental design (do not credit matched pairs) • The IVs e.g. use of name (affective) or not (non-affective), knowledge or no knowledge of task, instructions or no instructions, instructions at start or in middle of task. • The DV i.e. number of instructions followed • The controls e.g. same light fiction, order of presentation of instructions, use of monotone voice, pace of reading.	[3]	**1 mark** for each feature as indicated in the Answer Guidance. *However, only credit one IV and only credit one of the controls.* **0 marks –** No creditworthy information e.g. description of sample, findings, procedure etc. Examiner's Comments This was a reasonably well answered question with most candidates earning themselves two of the marks available. Most candidates knew to only focus on the research method, with most getting credit for identifying the type of experiment and experimental design used. Marks were also credited for the IV, DV and any control.
	b		*From Simon and Chabris' study into visual attention:* *Outline the 'gorilla condition'.* Possible features: • use of two teams of players • team passing a basketball between them • between 44-48 seconds / after about a minute / after a short period of time into the video gorilla appears • person in gorilla suit walked from left to right across the scene • this unexpected event lasted for about 5 seconds • the players did not interact with the gorilla • the participant was counting the number of passes throughout	[3]	**1 mark** for each feature as indicated in the Answer Guidance. *Examiners should note that for each mark allocation the candidate is required to include AT LEAST a specified number of features. But even if the candidate has included the required number of features, that number of marks does not have to be awarded i.e. even if three features have been included, if the answer does not read well / has inaccuracies, it should be capped at 2 marks.* Examiner's Comments Again – reasonably well answered with most candidates earning two. Sometimes this was because only two key features of the condition were offered or because there were enough features covered but they lacked clarity or detail, meaning the mark was capped at two.
			Total	6	