Mark Scheme (Results)

Summer 2019

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General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.

- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.

- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.

- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.

- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.

- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.

- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.

- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

Section A – Social psychology

Question Number	Answer	Mark
1(a)	**AO2 (2 marks)** Up to **two** marks for description of how Fuchsia could carry out volunteer sampling. For example: • Fuchsia could put an advertisement in the local newspaper for each of the towns (1) and specify a time and date for the participants to turn up and answer the questions about prejudice (1). **Look for other reasonable marking points**. **Answers must relate to the scenario.** **Generic answers score 0 marks.**	**(2)**

Question Number	Answer	Mark
1(b)	**AO2 (2 marks), AO3 (2 marks)** **One** mark for identification of the strength/weakness in relation to the study (AO2) **One** mark for justification of the strength/weakness (AO3) For example: Strength • Using thematic analysis will allow Fuchsia to summarise her qualitative data regarding prejudice in a manageable way (1). This will allow key features of the prejudicial attitudes to be highlighted in a simple way for others, such as policymakers, to interpret her findings easily (1). Weakness • Fuchsia's analysis of the responses to her questions regarding prejudice may be biased and subjective (1) as she is the only person analysing the data she may be selective about what she reports from the answers about prejudice (1). **Look for other reasonable marking points**. **Answers must relate to the scenario.** **Generic answers score 0 marks.**	**(4)**

Question Number	Answer	Mark
1(c)	**AO2 (1 mark), AO3 (1 mark)** **One** mark for identification of improvement in the context of the study (AO2) **One** mark for justification of the improvement (AO3) For example: • Fuchsia could shorten the third question as it is currently very long and participants may not understand what is meant by terms like 'authoritarianism' (1). By using less technical terms that participants can understand the question it would improve the validity of their responses about prejudice (1). **Look for other reasonable marking points**. **Answers must relate to the scenario.** **Generic answers score 0 marks.**	**(2)**

Question Number	Indicative Content	Mark
2	**AO1 (4 marks), AO3 (4 marks)** **AO1** • The theory assumes obedience is dependent upon the strength, immediacy, and number of social sources acting on a target individual. • Social impact theory proposes that obedience would be greater when the source is more immediate and there are fewer or no barriers. • The theory suggests obedience would be greater when there are more people affecting the target individual, but the proportional impact lessens as the total number of sources increases. • According to social impact theory it is predicted that there would be greater obedience when a source is high status and has a close relationship with the target individual. **AO3** • Social impact theory does not attempt to explain why someone will obey but simply outlines the factors involved. • Bassett and Latané (1976) found participants would assign nearby fictitious events in a newspaper more column inches than faraway events, which supports immediacy as a factor affecting obedience. • Milgram, Bickman and Berkowitz (1969) showed passers-by would crane their neck and gawk as more confederates looked up to a sixth floor window, showing that number of sources could affect obedience. • The theory ignores the role of personality factors, such as the authoritarian personality, which has been linked to higher levels of obedience so is not a complete explanation of obedience. **Look for other reasonable marking points**.	(8)

Question Number	Indicative Content	Mark

Level	Mark	Descriptor
AO1 (4 marks), AO3 (4 marks) **Candidates must demonstrate an equal emphasis between knowledge and understanding vs evaluation/conclusion in their answer.**		
Level 0	0	No rewardable material.
Level 1	1–2 marks	Demonstrates isolated elements of knowledge and understanding. (AO1) A conclusion may be presented, but will be generic and the supporting evidence will be limited. Limited attempt to address the question. (AO3)
Level 2	3–4 marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a superficial conclusion being made. (AO3)
Level 3	5–6 marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning leading to a conclusion being presented. Candidates will demonstrate a grasp of competing arguments but evaluation may be imbalanced. (AO3)
Level 4	7–8 marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical evaluation, containing logical chains of reasoning throughout. Demonstrates an awareness of competing arguments, presenting a balanced conclusion. (AO3)

Section B – Cognitive psychology

Question Number	Answer	Mark
3	**AO1 (2 marks)** Up to **two** marks for description of semantic memory. For example: • Semantic memory refers to facts and knowledge (1) that are like a 'mental encyclopaedia' of information (1). **Look for other reasonable marking points**.	**(2)**

Question Number	Answer	Mark
4(a)	**AO1 (2 marks)** **One** mark for statement of each finding from experiment I, II or III. For example: Experiment III Finding one • Baddeley (1966b) found a tendency for acoustically similar lists to be harder than the control list during early learning/from STM (1). Finding two • Baddeley (1966b) found the semantically similar list had poorer recall than the control list on the surprise retest/from LTM (1). **Look for other reasonable marking points**.	**(2)**

Question Number	Answer	Mark
4(b)	**AO1 (2 marks), AO3 (2 marks)** **One** mark for identification of each weakness (AO1) **One** mark for justification of each weakness (AO3) For example: • Baddeley (1966b) provided participants with lists of words to assess memory through the recall of correct sequences which lacks task validity (1). People usually remember conversations or telephone numbers but not word lists so the findings may not represent real life memory (1). • The study took place in a laboratory where individual words were read out/shown to the participants which is a controlled, artificial situation so lacks ecological validity (1) because the participants may have changed their behaviour from real life and could have tried harder to learn the words unlike their daily use of memory (1). **Look for other reasonable marking points**.	**(4)**

Question Number	Indicative content	Mark
5	**AO1 (4 marks), AO2 (4 marks)** For example: Key question: How reliable is eyewitness testimony? **AO1** • Unreliable eyewitness testimony can mean innocent individuals go to prison. • The Innocence Project (2015) identified that 72% of wrongful convictions were partly or wholly due to eyewitness misidentification showing it is a key issue for society. • Society will lose trust in the criminal justice system if innocent people are consistently being sent to jail so crimes may go unreported through fear of this continuing to happen. • Ronald Cotton was misidentified by Jennifer Thomson-Cannino and spent more than 10 years in prison for rape which could have been avoided with reliable eyewitness procedures. **AO2** • Reconstructive memory theory would propose that reconstructive errors are made by eyewitnesses due to them filling in the gaps of the recall with information from their schemas. • If an eyewitness does not pay attention to a crime and later rehearse the events their testimony may be inaccurate according to multi store model. • Misinformation could be given to witnesses in the form of leading questions and could mean they incorporate errors in their recall of a crime, leading to inaccurate testimony. • Peterson and Peterson (1959) showed rehearsal was important in retaining trigrams so if eyewitnesses rehearsed events repeatedly they may be able to give a more accurate version of events. **Look for other reasonable marking points.**	**(8)**

Level	Mark	Descriptor
AO1 (4 marks), AO2 (4 marks) Candidates must demonstrate an equal emphasis between knowledge and understanding vs application in their answer.		
Level 0	0	No rewardable material
Level 1	1–2 marks	Demonstrates isolated elements of knowledge and understanding. (AO1) Provides little or no reference to relevant evidence from the context (scientific ideas, processes, techniques and procedures). (AO2)
Level 2	3–4 marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Discussion is partially developed, but is imbalanced or superficial occasionally supported through the application of relevant evidence from the context (scientific ideas, processes, techniques and procedures). (AO2)
Level 3	5–6 marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning. Candidates will demonstrate a grasp of competing arguments but discussion may be imbalanced or contain superficial material supported by applying relevant evidence from the context (scientific ideas, processes, techniques and procedures). (AO2)
Level 4	7–8 marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical balanced discussion, containing logical chains of reasoning. Demonstrates a thorough awareness of competing arguments supported throughout by sustained application of relevant evidence from the context (scientific ideas, processes, techniques or procedures). (AO2)

Section C – Biological psychology

Question Number	Answer	Mark
6	**AO2 (3 marks)** Up to **three** marks for description of how hormones could account for Charles's behaviour. For example: • Charles may have an imbalance of testosterone to cortisol (T/CRT ratio) which could have contributed to him being aggressive when shouting insults at his peers (1). Charles may have been exposed to more testosterone in the womb and during puberty which could have lead to him becoming more aggressive in his science class (1). Letting in an important goal may cause stress but his cortisol levels may not have increased enough to inhibit his aggression and stop the fight with the captain (1). **Look for other reasonable marking points**. **Answers must relate to the scenario.** **Generic answers score 0 marks.**	**(3)**

Question Number	Answer	Mark
7(a)	**AO2 (2 marks)** **One** mark for a partially operationalised hypothesis. **Two** marks for a fully operationalised hypothesis. For example: • There will be a negative correlation between age and attitude to drug use (1). • There will be a negative correlation between the participant's age in years and a lenient attitude to drug use measured on a scale out of 10 (2). **Look for other reasonable marking points**. **Answers must relate to their practical investigation.** **Generic answers score 0 marks.**	**(2)**

Question Number	Answer	Mark
7(b)	**AO2 (2 marks)** Up to **two** marks for description of the results of their Spearman's rank correlation coefficient/statistical test. For example: • My Spearman's value was -0.985 which means there was a very strong correlation because this is very close to -1 (1). The value is also negative so this showed that as age increased, lenient attitudes to drug use decreased (1). **Look for other reasonable marking points**. **Answers must relate to their practical investigation.** **Generic answers score 0 marks.**	**(2)**

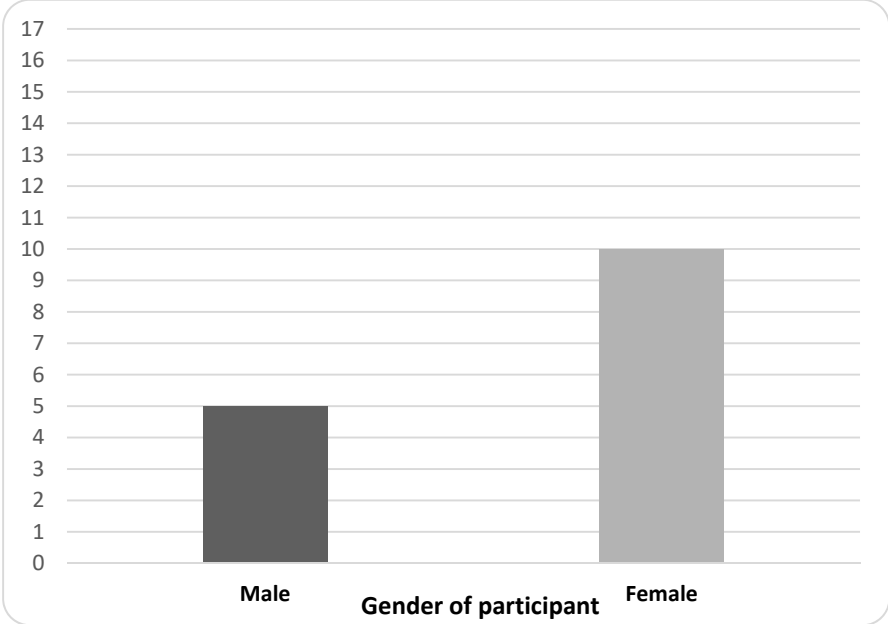| Question Number	Answer	Mark
7(c)	**AO2 (1 mark), AO3 (1 mark)** **One** mark for identification of a strength of the practical investigation (AO2). **One** mark for justification of the strength of the practical investigation (AO3). For example: • My correlational study into age and attitudes to drug use was controlled using the same questions for everybody so it can be tested for reliability (1) because I can replicate the study multiple times to check for consistency in the results about attitudes and drug use (1). **Look for other reasonable marking points**. **Answers must relate to their practical investigation.** **Generic answers score 0 marks.**	**(2)**

Question Number	Answer	Marks
7(d)	**AO2 (1 mark), AO3 (1 mark)** **One** mark for identification of an improvement of their practical investigation (AO2). **One** mark for justification of the improvement for their practical investigation (AO3). For example: • I could have used open-ended questions so the participants would be able to explain their attitudes towards using drugs (1) which would have increased validity by gaining more in-depth data about why they held their beliefs about drug use (1). **Look for other reasonable marking points.** **Answers must relate to their practical investigation.** **Generic answers score 0 marks.**	**(2)**

Question Number	Indicative content	Marks
8	**AO1 (4 marks) AO3 (4 marks)** **AO1** • Raine et al. (1997) examined the brains of 41 people who pleaded Not Guilty by Reason of Insanity (NGRI) and compared these to 41 controls. • The participants were matched for sex, had a similar age (31.7 years), and did not take medication for a period before the study. • A PET scan was used to measure the brain activity of the participants. • They found that NGRIs had less activity in their prefrontal and parietal brain regions compared to controls. **AO3** • The sample of participants charged with murder was unique and a large amount of this select population was used, which increases generalisability. • The controls used in terms of sex, age, medication mean that the study was able to compare the groups reliably with few extraneous variables. • The PET scans of murderers took place in an artificial setting so the participants may have acted differently when commiting their crime in real life so the study lacks ecological validity. • The findings could be used to screen the population and identify individuals who match the NGRI brain activity which is a socially sensitive issue. **Look for other reasonable marking points.**	**(8)**

Level	Mark	Descriptor
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	0	No rewardable material.
Level 1	1-2 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) A conclusion may be presented, but will be generic and the supporting evidence will be limited. Limited attempt to address the question. (AO3)
Level 2	3-4 Marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a superficial conclusion being made. (AO3)
Level 3	5-6 Marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning leading to a conclusion being presented. Candidates will demonstrate a grasp of competing arguments but evaluation may be imbalanced. (AO3)
Level 4	7-8 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical evaluation, containing logical chains of reasoning throughout. Demonstrates an awareness of competing arguments, presenting a balanced conclusion. (AO3)

AO1 (4 marks), AO3 (4 marks)
Candidates must demonstrate an equal emphasis between knowledge and understanding vs evaluation/conclusion in their answer.

Section D – Learning theories

Question Number	Answer	Mark
9(a)	**AO2 (1 mark)** **One** mark for identification of the observation type. For example: • Covert observation. **Look for other reasonable marking points**.	**(1)**

Question Number	Answer	Mark
9(b)	**AO2 (3 marks)** **One** mark for correct/appropriate title (see graph below for a suitable example) **One** mark for correct/appropriate labelling of axes (see graph below for a suitable example) **One** mark for correct plots of data points (see graph below for correct plotting) **A bar chart to show the number of males and females who watched a horror film in a local cinema** **Look for other reasonable marking points**.	**(3)**

Question Number	Answer	Mark
9(c)	**AO2 (4 marks)** **One** mark for accurate completion of O-E column. **One** mark for accurate completion of $(O-E)^2$ column. **One** mark for accurate completion of $(O-E)^2$/E column. **One** mark for correct answer **2.98** to two decimal places.	**(4)**

		Observed	Expected	O-E	$(O-E)^2$	$(O-E)^2$ /E
Males	Comedy Films	12	9.5	**2.5**	**6.25**	**0.66**
	Horror Films	5	7.5	**-2.5**	**6.25**	**0.83**
Females	Comedy Films	7	9.5	**-2.5**	**6.25**	**0.66**
	Horror Films	10	7.5	**2.5**	**6.25**	**0.83**
				Chi-squared =		**2.98**

Look for other reasonable marking points.

Question Number	Answer	Mark
9(d)	**AO2 (1 mark)** **One** mark for accurate determination of a significant difference. For example: • There is no significant difference between male and female film choice because the calculated value (2.98) is less than the critical value (3.84) for a two-tailed test at p=0.05 (1). **Look for other reasonable marking points**.	**(1)**

Question Number	Answer	Mark
9(e)	**AO2 (1 mark), AO3 (1 mark)** **One** mark for identification of a weakness in relation to the scenario (AO2) **One** mark for justification of the weakness (AO3) For example: • Collecting quantitative data about film choice at the cinema may lack validity in terms of why someone went to see that film (1). This is because Malik will not know the underlying reasons why the participants chose to see a horror or comedy film so cannot be sure it was their personal choice to pick the type of film (1). **Look for other reasonable marking points**. **Answers must relate to the scenario.** **Generic answers score 0 marks.**	**(2)**

Question Number	Indicative Content	Mark
10	**AO1 (4 marks), AO2 (4 marks)** **AO1** • Social learning involves an individual admiring a role model and copying their behaviour. • Social learning involves attention, which is the process of noticing and being interested in the behaviour. • If an individual is rewarded they are more likely to reproduce the learned behaviour and continue displaying it in future. • The learned behaviour may make the individual feel proud or good internally so serve as self-reinforcement. **AO2** • Holly may see her father as a role model and want to imitate his behaviour with the fork. • Holly will notice and be interested in how her father holds the fork and how he stabs the food. • Tom saying "well done" to Holly for using the fork correctly is a reward, which will encourage Holly to use her fork again. • Holly is smiling and laughing when stabbing the food with the fork correctly so this could show she is proud and so is self-reinforcement. **Look for other reasonable marking points.**	**(8)**

Level	Mark	Descriptor
AO1 (4 marks), AO2 (4 marks) **Candidates must demonstrate an equal emphasis between knowledge and understanding vs application in their answer.**		
Level 0	0	No rewardable material
Level 1	1–2 marks	Demonstrates isolated elements of knowledge and understanding. (AO1) Provides little or no reference to relevant evidence from the context (scientific ideas, processes, techniques and procedures). (AO2)
Level 2	3–4 marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Discussion is partially developed, but is imbalanced or superficial occasionally supported through the application of relevant evidence from the context (scientific ideas, processes, techniques and procedures). (AO2)
Level 3	5–6 marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning. Candidates will demonstrate a grasp of competing arguments but discussion may be imbalanced or contain superficial material supported by applying relevant evidence from the context (scientific ideas, processes, techniques and procedures). (AO2)
Level 4	7–8 marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical balanced discussion, containing logical chains of reasoning. Demonstrates a thorough awareness of competing arguments supported throughout by sustained application of relevant evidence from the context (scientific ideas, processes, techniques or procedures). (AO2)

Section E – Issues and Debates

Question Number	Indicative content	Mark
11	**AO1 (4 marks), AO3 (4 marks)** **AO1** • Respect requires researchers to keep participant details private and confidential. • Respect involves giving full informed consent to the participant before the research study. • Responsibility involves being protecting participants from harm. • Respect includes offering the participants the right to withdraw from the research at any time. **AO3** • Case studies in cognitive psychology regularly give participants a pseudonym to protect their identity, such as H.M., so this research is therefore ethical. • Sherif (1954/1961) had an individual interview the parents to explain the purpose and aim of the study and gain permission for the boys to participate in all camp activities and give their own permission so this shows informed consent was obtained. • Participants in Milgram's research showed visible signs of distress when they thought they were electrocuting the learner so by not protecting participants social psychology research may not be ethical. • Researchers working with H.M. could offer the right to withdraw but due to his impaired memory the extent to which this was followed is questionable, so this research may not be ethical. **Look for other reasonable marking points.**	**(8)**

Level	Mark	Descriptor
AO1 (4 marks), AO3 (4 marks) **Ccandidates must demonstrate an equal emphasis between knowledge and understanding vs assessment/conclusion in their answer.**		
Level 0	0	No rewardable material
Level 1	1–2 marks	Demonstrates isolated elements of knowledge and understanding. (AO1) Generic assertions may be presented. Limited attempt to address the question. (AO3)
Level 2	3–4 marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a generic or superficial assessment being presented. (AO3)
Level 3	5–6 marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning leading to an assessment being presented which considers a range of factors. Candidates will demonstrate understanding of competing arguments/factors but unlikely to grasp their significance. The assessment leads to a judgement but this may be imbalanced. (AO3)
Level 4	7–8 marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical assessment, containing logical chains of reasoning throughout. Demonstrates an awareness of the significance of competing arguments/factors leading to a balanced judgement being presented. (AO3)

Question Number	Indicative content	Mark
12	**AO1 (6 marks), AO3 (6 marks)** **AO1** • To be scientific psychology should have a high degree of control which should minimise extraneous variables as far as possible • Hypothesis testing is used to enable concepts to be falsified. • Science uses a hypothetico-deductive model for experimental research. • A scientific approach will look for cause and effect relationships. • In order to be defined as a science an approach should conduct research in a controlled, artificial setting to aid replication. • Scientific concepts tend to be studied independent of their context so are reductionist. **AO3** • Raine et al. (1997) used the same continuous performance task and ensured medication did not affect the brain scans, so studies such as this are scientific. • When testing the effects of recreational drugs, such as alcohol, biological psychologists hypothesise the impact that it will have, for example to increase serotonin and elevate mood, which contributes to it being scientific. • The role of hormones such as testosterone could be assessed using the hypothetico-deductive model where data is collected on those with high or low testosterone to see how this influences behaviour, which suggests biological psychology is scientific. • Brain scans are used in biological psychology which can be replicated using different participants in a controlled, artificial setting in a laboratory so this approach is scientific. • Biological psychology uses correlation which does not explain the underlying causes behind relationships so to some extent it is not scientific. • Evolution and natural selection takes into account the environment, socialisation, and the interrelationships between them so is not a fully reductionist concept so this is not wholly scientific. **Look for other reasonable marking points.**	**(12)**

Level	Mark	Descriptor
		AO1 (6 marks), AO3 (6 marks) **Candidates must demonstrate an equal emphasis between knowledge and understanding vs judgement/conclusion in their answer.**
	0	No rewardable material.
Level 1	1–3 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) A judgement/decision may be presented, but will be generic and the supporting evidence will be limited. Limited attempt to address the question. (AO3)
Level 2	4–6 Marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material leading to a judgement/decision being presented. Candidates will demonstrate a grasp of competing arguments but response may be imbalanced. (AO3)
Level 3	7–9 Marks	Demonstrates accurate knowledge and understanding. (AO1) Displays a mostly developed and logical argument, containing mostly coherent chains of reasoning. Demonstrates an awareness of competing arguments, presenting a judgement/decision which may be imbalanced. (AO3)
Level 4	10–12 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical argument, containing logical chains of reasoning throughout. Demonstrates an awareness of competing arguments and presents a balanced response, leading to an effective nuanced and balanced judgement/decision. (AO3)