

**GCSE
PSYCHOLOGY
8182/2**

Paper 2 Social Context and Behaviour

Mark scheme

June 2021

Version: 1.1 Final Mark Scheme



Mark schemes are prepared by the Lead Assessment Writer and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation events which all associates participate in and is the scheme which was used by them in this examination. The standardisation process ensures that the mark scheme covers the students' responses to questions and that every associate understands and applies it in the same correct way. As preparation for standardisation each associate analyses a number of students' scripts. Alternative answers not already covered by the mark scheme are discussed and legislated for. If, after the standardisation process, associates encounter unusual answers which have not been raised they are required to refer these to the Lead Examiner.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of students' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

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Level of response marking instructions

Level of response mark schemes are broken down into levels, each of which has a descriptor. The descriptor for the level shows the average performance for the level. There are marks in each level.

Before you apply the mark scheme to a student's answer read through the answer and annotate it (as instructed) to show the qualities that are being looked for. You can then apply the mark scheme.

Step 1 Determine a level

Start at the lowest level of the mark scheme and use it as a ladder to see whether the answer meets the descriptor for that level. The descriptor for the level indicates the different qualities that might be seen in the student's answer for that level. If it meets the lowest level then go to the next one and decide if it meets this level, and so on, until you have a match between the level descriptor and the answer. With practice and familiarity you will find that for better answers you will be able to quickly skip through the lower levels of the mark scheme.

When assigning a level you should look at the overall quality of the answer and not look to pick holes in small and specific parts of the answer where the student has not performed quite as well as the rest. If the answer covers different aspects of different levels of the mark scheme you should use a best fit approach for defining the level and then use the variability of the response to help decide the mark within the level, ie if the response is predominantly level 3 with a small amount of level 4 material it would be placed in level 3 but be awarded a mark near the top of the level because of the level 4 content.

Step 2 Determine a mark

Once you have assigned a level you need to decide on the mark. The descriptors on how to allocate marks can help with this. The exemplar materials used during standardisation will help. There will be an answer in the standardising materials which will correspond with each level of the mark scheme. This answer will have been awarded a mark by the Lead Examiner. You can compare the student's answer with the example to determine if it is the same standard, better or worse than the example. You can then use this to allocate a mark for the answer based on the Lead Examiner's mark on the example.

You may well need to read back through the answer as you apply the mark scheme to clarify points and assure yourself that the level and the mark are appropriate.

Possible content in the mark scheme is provided as a guide for examiners. It is not intended to be exhaustive and you must credit other valid points. Students do not have to cover all of the points mentioned in the possible content to reach the highest level of the mark scheme.

An answer which contains nothing of relevance to the question must be awarded no marks.

Examiners are reminded that AO1 and AO2 are regarded as interdependent. When deciding on a mark in instances where there is an attempt at more than one assessment objective all attempts should be considered together using the best fit approach. In doing so, examiners should bear in mind the relative weightings of the assessment objectives.

When an answer only contains content related to one of the skills (AO1/AO2), then the levels descriptors for the award of marks for the skill attempted should be applied to the answer, up to the maximum mark available.

Section A

Social influence

01	<p>Which of the following is a social factor that affects obedience?</p> <p>Shade one box.</p> <p style="text-align: right;">[1 mark]</p>
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Marks for this question: AO1 – 1 mark

Answer – B (Proximity)

02	<p>Task difficulty and expertise are two factors known to affect conformity.</p> <p>Use an example to describe how each of these factors could affect conformity.</p> <p style="text-align: right;">[2 marks]</p>
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Marks for this question: AO2 – 2 marks

Up to **2 marks** for appropriate example(s) used to describe how task difficulty and expertise could affect conformity.

2 marks: clear and accurate example(s) that describe **HOW** each factor could affect conformity.

1 mark: limited or muddled example(s).

Possible content

- If a task is complicated (e.g. solving a complex maths problem), people are more likely to conform than when it is easy (e.g. being asked to work out 2+2).
- If a participant has expertise that they could use (e.g. being a mathematician), they would be less likely to conform than when they do not have relevant knowledge/experience.

NOTE: Answers can give two different examples or use the same one for both factors. Both are equally acceptable.

NOTE: If the answer is just a definition/outline of the factor(s) and **does not** use an example, award **NO** mark.

03	Briefly evaluate Adorno's theory of the Authoritarian Personality.	[3 marks]
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Marks for this question: AO3 – 3 marks

Up to **3 marks** for evaluation of Adorno's theory of the Authoritarian Personality.

3 marks: a clear and detailed evaluation.

2 marks: a limited evaluation.

1 mark: a very limited and/or muddled evaluation.

Possible content

- Adorno based his theory on a questionnaire (F-scale). The F-scale has been criticised because it has a response bias/the questions are written in such a way that giving a yes answer is always an authoritarian response.
- Adorno has not provided proof that an authoritarian personality actually causes high levels of obedience. He only found a correlation between personality type and obedience. This means that cause and effect cannot be proved.
- Some of Milgram's most obedient participants did not have the authoritarian/strict upbringing as Adorno suggested they would.
- Researchers have found that people with lower educational levels are more obedient. This suggests that other dispositional factors may be important, and that personality type is not enough on its own.

Credit other relevant content.

NOTE: Do not award marks for 'it excuses people who do terrible things because they have been ordered to'.

04	Briefly explain two weaknesses of laboratory experiments. Refer to Asch's study of conformity in your answer.	[4 marks]
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Marks for this question: AO2 – 2 marks and AO3 – 2 marks

Level	Marks	Description
2 Clear	3–4	<p>AO2: Clear and accurate application of knowledge and understanding of Asch's study of conformity.</p> <p>AO3: Analysis and evaluation of laboratory experiments is effective and addresses two weaknesses. Any conclusions drawn are sound and fully expressed.</p> <p>Relevant terminology is used consistently throughout. The answer demonstrates a high level of substantiated reasoning, and is clear, coherent and focused.</p>
1 Basic	1–2	<p>AO2: Limited or muddled application of knowledge and understanding of Asch's study of conformity.</p> <p>AO3: Analysis and evaluation of laboratory experiments is of limited effectiveness or muddled and may not address two weaknesses. Any attempts to draw conclusions are not always successful.</p> <p>Relevant terminology is occasionally used. The answer occasionally demonstrates substantiated reasoning, but may lack clarity, coherence, focus and logical structure.</p>
0	0	No relevant content.

Possible content

AO2 and AO3

- Participants know they are taking part in a study because of the artificial situation. Even though Asch's participants didn't know they were the only real participant, they did know they were in a study, and that would have changed their behaviour.
- Laboratory experiments often use artificial tasks that people do not normally have to do in real life. In Asch's study they had to compare the length of lines which is nothing like an everyday task that people do.
- Laboratory experiments need to be ethical and ask participants to do tasks that are safe. This often means that the tasks are trivial – like comparing the length of lines.

Credit other relevant content.

NOTE: The AO2 may be embedded in the AO3 or separate; both are equally acceptable.

05	Describe and evaluate Piliavin’s subway study.	[9 marks]
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Marks for this question: AO1 – 4 marks and AO3 – 5 marks

Level	Marks	Description
3 Detailed	7–9	<p>AO1: Relevant knowledge and understanding of Piliavin’s subway study is accurate with detail.</p> <p>AO3: Analysis and evaluation of Piliavin’s subway study is effective. Any conclusions drawn are sound and fully expressed.</p> <p>Relevant terminology is used consistently throughout. The answer demonstrates a high level of substantiated reasoning, is clear, coherent and focused.</p>
2 Clear	4–6	<p>AO1: Relevant knowledge and understanding of Piliavin’s subway study is present but there are occasional inaccuracies/omissions.</p> <p>AO3: There may be some effective analysis and evaluation of Piliavin’s subway study. There may be an attempt to draw conclusions.</p> <p>Relevant terminology is usually used. The answer frequently demonstrates substantiated reasoning, and is clear, generally coherent and focused although structure may lack some logic.</p>
1 Basic	1–3	<p>AO1: Knowledge and understanding of Piliavin’s subway study is present but limited.</p> <p>AO3: Analysis and evaluation of Piliavin’s subway study is of limited effectiveness or may be absent. Any attempts to draw conclusions are not always successful or present.</p> <p>Relevant terminology is occasionally used. The answer occasionally demonstrates substantiated reasoning, but may lack clarity, coherence, focus and logical structure.</p>
0	0	No relevant content.

Possible content

AO1

- Piliavin’s aim was to investigate the effect that a victim’s appearance would have on helping behaviour.
- His study was a field experiment carried out on a subway train in New York City. On a number of different journeys, an actor pretended to collapse in a train carriage. Each time, the actor’s appearance was changed. In some of the trials he appeared to be drunk, in others he appeared to be sober and carried a walking stick.
- Observers recorded how often and how quickly the actor/victim was helped.
- When the actor/victim was carrying a walking stick, he was helped within 70 seconds in 95 per cent of the incidents. But when he appeared to be drunk, he was only helped 50 per cent of the time.

- Piliavin concluded that a person's appearance will affect whether or not they receive help and how quickly help is given.

AO3

- Piliavin's study was a field experiment which means that there was very little control of possible extraneous variables. This means that it is not possible to know for sure if the independent variable was the only thing affecting the dependent variable.
- This study was carried out in a natural setting and the participants were passengers on the subway who were just doing what they did every day. They did not know they were taking part in a study. This is positive because it meant they did not show demand characteristics but acted as they usually would, and this means that it has high ecological validity and can be applied to explain bystander behaviour in real-life situations.
- Because the participants were unaware that they were taking part in a psychological study, they were not able to give any consent and because they were on a subway carriage and left at different points and carried on with their day, they also were not debriefed or asked for permission to use their results. This makes the ethics somewhat questionable.
- The participants were most likely people who lived in New York, and they may behave differently to people from other countries or those who don't live in big cities. This means their behaviour cannot be generalised to other places and cultures – especially collectivist cultures.

Credit other relevant content.

NOTE: Methodological issues are creditworthy as long as they are not generic.

06.1	What is meant by the term deindividuation? Refer to the conversation in your answer. [3 marks]
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Marks for this question: AO1 – 2 marks and AO2 – 1 mark

AO1

Up to **2 marks** for a definition of the term deindividuation.

2 marks: a clear and accurate definition.

1 mark: a limited or muddled definition.

Deindividuation is becoming so immersed in the norms of the group that people lose their sense of individuality/identity and self-awareness, resulting in feeling less responsibility for their actions.

PLUS

AO2

1 mark for a reference to the conversation that is relevant to the concept of deindividuation.

Example:

Liam wasn't sure why he joined in the fight; this may be because he lost his sense of self-awareness.

Credit other relevant content.

06.2	Explain why Liam joined in the fight but Lukas did not. Use the conversation and your knowledge of dispositional factors in your answer. [3 marks]
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Marks for this question: AO2 – 3 marks

Up to **3 marks** for an explanation.

3 marks: a clear and detailed explanation of **both** boys' behaviour using the conversation **and** knowledge of dispositional factors.

2 marks: a limited explanation.

1 mark: a very limited and /or muddled explanation.

Possible content

- One dispositional factor that affects how likely it is that people take part in collective behaviour is personality. Liam may be more likely to go along with the crowd because he is concerned about what others think about him and didn't see that he had a choice.
- Another dispositional factor that affects how likely it is that people take part in collective behaviour is morality. Lukas has a strong belief that violence is wrong, and this has helped him to walk away instead of joining in.

Credit other relevant content.

Section B

Language, thought and communication

07	<p>Read the following descriptions of types of body language.</p> <p>Write A, B, C or D in the box next to each description.</p> <p>A. Closed posture B. Open posture C. Postural echo D. Touch</p> <p style="text-align: right;">[2 marks]</p>
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Marks for this question: AO1 – 2 marks

Mirroring another person's body position	C
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Positioning the arms so that they are folded across the body	A
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08	Outline Piaget’s theory that language depends on thought.	[4 marks]
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Marks for this question: AO1 – 4 marks

Level	Marks	Description
2 Clear	3–4	Clear and accurate knowledge of Piaget’s theory with some detail. Relevant terminology is used consistently throughout. The answer demonstrates a high level of substantiated reasoning, is clear, coherent and focused.
1 Basic	1–2	Limited or muddled knowledge of Piaget’s theory is present. Relevant terminology is occasionally used. The answer occasionally demonstrates substantiated reasoning, but may lack clarity, coherence, focus and logical structure.
0	0	No relevant content.

Possible content

- Piaget’s theory says that children develop language by matching the correct words to their existing knowledge of the world. The child’s understanding of the concept comes first and then they learn how to express their understanding of it – hence his theory is that language depends on thought.
- Piaget believed that cognitive development leads to the growth of language, and this means that we can only use language at a level that matches our cognitive development.
- A child may copy a word when they hear others use it, but, until they understand the concept, they will not actually be able to use the word to communicate.
- Piaget’s theory is that children develop their ability to use language in stages.
- In the sensorimotor stage, babies are learning what their bodies can do, and this includes making vocal sounds. Babies begin to copy the sounds that they hear others making.
- In the preoperational stage, children are able to voice their internal thoughts but there is limited use of language for communicating with other people.
- In the concrete operational stage, language has developed a lot, but it is only used to talk about actual, concrete things.
- In the formal operational stage, language can be used to talk about abstract, theoretical ideas.
- Piaget believed that, while all children move through these stages, some people do not get to the formal operational stage.

Credit other relevant content.

09.1	Using your knowledge of Von Frisch’s bee study, identify the dance the painted bees would use to communicate how close the sugar water was. [1 mark]
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Marks for this question: AO2 – 1 mark

Possible content

- The round dance.
- The bees would have turned rapidly in circles (to the right and then the left).

NOTE: Drawings of the dance are creditworthy as long as they are for the round dance and not the waggle dance.

09.2	Explain one reason why the described study carried out by the psychologist might not produce valid results. [2 marks]
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Marks for this question: AO2 – 2 marks

Up to **2 marks** for an appropriate explanation.

2 marks: a clear and accurate explanation.

1 mark: a limited or muddled explanation.

Possible content

- Bees do not normally collect sugar water for food. So this is not a test of natural behaviour, which means it can be argued that the study lacks ecological validity.
- Bees are not normally painted with small dots, and this could have changed the bees’ natural behaviour, so the study wouldn’t actually be studying what it claimed.

Credit other relevant content.

NOTE: Answers that evaluate Von Frisch’s study are only creditworthy if they also fit with the information provided in the described study.

09.3	Briefly outline one function of animal communication. Refer to the described study carried out by the psychologist in your answer.	[3 marks]
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Marks for this question: AO1 – 2 marks and AO2 – 1 mark

AO1

Up to **2 marks** for an outline of **one** function of animal communication.

2 marks: a clear and accurate outline.

1 mark: a limited or muddled outline.

Possible content

- Survival – meeting and protecting the needs of the individual/social group in order to ensure continued existence, (e.g. alarm signals that provide information about the presence of a predator or rival).
- Reproduction – courtship/attracting a mate or competing with other potential suitors for access to mates. Mating/coordinating the mating act.
- Territory - to mark, maintain, protect/defend, or increase territory. To establish dominance over a rival/social group/area.
Food – alerting a mate or those in the same social group to the discovery/presence/quality/quantity of food. To help others find the location of food sources. To keep others away from a food source (e.g. threat display to warn others off).

Accept other creditworthy answers such as parent-offspring socialisation, self-defence, and navigation.

PLUS

AO2

1 mark for an appropriate reference to the study.

Examples:

In the study, the bees used dance moves to communicate where the food source was.

In the study, the bees couldn't communicate that the food was 'up'. This is because the functions of animal communication are limited.

Credit other relevant references.

NOTE: The AO1 may be embedded in the AO2 or separate; both are equally acceptable.

10	Use the conversation above to explain two factors that can affect personal space. [4 marks]
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Marks for this question: AO2 – 4 marks

Up to **2 marks** for each explanation of factors that can affect personal space **using** the conversation.

2 marks: a clear and accurate explanation.

1 mark: a limited or muddled explanation.

Possible content

- One factor affecting personal space is gender and that's why Mr Brent stands further away from Miss Williams (someone of the opposite gender) than he does from Mr Douglas (someone of the same gender).
- Another factor affecting personal space is status and that's why Mr Brent stands further away from Mrs Wilkes (someone of higher status) than he does from Miss Williams (someone of the same status).

Accept other creditworthy answers such as age, culture/cultural norms, similarity, and familiarity/relationship.

NOTE: If the answer is just an outline/description of the factor(s) and **does not** use the conversation, award **NO** mark.

11	<p>Briefly describe both Yuki’s study of emoticons and Gregory’s constructivist theory of perception.</p> <p>Discuss whether or not the results of Yuki’s study support Gregory’s theory. Use your knowledge of both in your answer.</p> <p style="text-align: right;">[9 marks]</p>
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Marks for this question: AO1 – 4 marks and AO3 – 5 marks

Level	Marks	Description
3 Detailed	7–9	<p>AO1: Relevant knowledge and understanding of both Yuki’s study of emoticons and Gregory’s constructivist theory of perception is accurate with detail.</p> <p>AO3: Analysis and evaluation of how Yuki’s study of emoticons may or may not support Gregory’s constructivist theory of perception is effective. Any conclusions drawn are sound and fully expressed.</p> <p>Relevant terminology is used consistently throughout. The answer demonstrates a high level of substantiated reasoning, is clear, coherent and focused.</p>
2 Clear	4–6	<p>AO1: Relevant knowledge and understanding of Yuki’s study of emoticons and/or Gregory’s constructivist theory of perception is present but there are occasional inaccuracies/omissions.</p> <p>AO3: Analysis and evaluation of how Yuki’s study of emoticons may or may not support Gregory’s constructivist theory of perception is present and is somewhat effective. There may be an attempt to draw conclusions.</p> <p>Relevant terminology is usually used. The answer frequently demonstrates substantiated reasoning, and is clear, generally coherent and focused although structure may lack some logic.</p>
1 Basic	1–3	<p>AO1: Knowledge and understanding of Yuki’s study of emoticons and/or Gregory’s constructivist theory of perception is present but limited.</p> <p>AO3: Analysis and evaluation of how Yuki’s study of emoticons may or may not support Gregory’s constructivist theory of perception is of limited effectiveness or may be absent. Any attempts to draw conclusions are not always successful or present.</p> <p>Relevant terminology is occasionally used. The answer occasionally demonstrates substantiated reasoning, but may lack clarity, coherence, focus and logical structure.</p>
0	0	No relevant content.

Possible content

AO1

- Yuki asked American and Japanese students to rate six different emoticon faces on how happy they thought they were.
- The Japanese students gave the highest ratings to the faces with happy eyes and lowest ratings to the faces with sad eyes. The American students gave the highest ratings to the faces with the happy mouths and the lowest ratings to the faces with sad mouths – showing that the Japanese focused more on the eyes while the Americans focused more on the mouth.
- According to Gregory, perception is an active process and involves drawing inferences/guesses about the best explanation for what is being experienced using both sensations (nature) and stored knowledge (nurture).
- Stored knowledge and expectations come from past experiences which will be individual depending on the nurturing environment.

AO3

- Gregory says that perception is an active process, and we need to interpret what we see based on experience. This means that not all people understand things they see in the same way – Yuki's results support this because the Japanese and American students did not interpret the emoticon faces in the same way.
- Gregory says that our past experiences and nurturing environment affect how we understand what we see – Yuki's results support this because the differences in how his participants understood the emoticon faces was the result of growing up in different cultures.
- Therefore it is possible to say that the results of Yuki's study do support Gregory's theory.

Credit other relevant content.

Section C

Brain and neuropsychology

12.1	Complete the following sentence. Shade one box only. Sensory neurons carry information... <div style="text-align: right;">[1 mark]</div>
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Marks for this question: AO1 – 1 mark

Answer – C (to the central nervous system)

12.2	Complete the following sentence. Shade one box only. Relay neurons carry information... <div style="text-align: right;">[1 mark]</div>
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Marks for this question: AO1 – 1 mark

Answer – E (within the central nervous system)

13	Outline two differences between the autonomic nervous system and the somatic nervous system. [4 marks]
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Marks for this question: AO1 – 4 marks

Up to **2 marks** for each outline of a difference between the autonomic nervous system and the somatic nervous system.

2 marks: a clear and accurate outline.

1 mark: a limited or muddled outline.

Possible content

- The autonomic nervous system acts involuntarily but the somatic nervous system controls voluntary movements.
- The autonomic nervous system is divided into two parts (the sympathetic and parasympathetic divisions) but the somatic nervous system isn't.
- The nerve fibres in the autonomic nervous system are not myelinated but the nerve fibres in the somatic nervous system are.
- Nerve fibres in the autonomic nervous system carry messages more slowly than those in the somatic nervous system.

Credit other relevant content.

14	Using your knowledge of the nervous system, explain why you are likely to be experiencing the described physical effects.	[4 marks]
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Marks for this question: AO2 – 4 marks

Level	Marks	Description
2 Clear	3–4	<p>Clear and accurate application of knowledge and understanding of fight or flight response addressing the physical effects stated in the described scenario.</p> <p>Relevant terminology is used consistently throughout. The answer demonstrates a high level of substantiated reasoning, is clear, coherent and focused.</p>
1 Basic	1–2	<p>Limited or muddled application of knowledge and understanding of fight or flight response addressing the physical effects stated in the described scenario.</p> <p>Relevant terminology is occasionally used. The answer occasionally demonstrates substantiated reasoning, but may lack clarity, coherence, focus and logical structure.</p>
0	0	No relevant content

Possible content

- It is likely that I am experiencing the fight or flight response. This is an automatic response to a real or perceived threat – like almost being hit by a car!
- My autonomic nervous system has reacted to the threat of nearly being run over by switching from parasympathetic activity to sympathetic activity. There is now adrenaline being released into my blood stream.
- When this happens, a number of changes take place physically – I am breathing more quickly and my heart rate has increased so that I have more oxygen in my blood and I am sweating to cool down my muscles. These are all so that I can run away from the danger – the out-of-control car.
- My mouth is dry because in the sympathetic state, I am not producing saliva – because eating is definitely not important when faced with something that might run you over!

Credit other relevant content.

NOTE: If answers **do not** address the physical effects stated in the described scenario but simply explain the fight or flight response, award a maximum of **one** mark.

NOTE: There are a high number of possible technical terms that are relevant here. Answers can be considered clear and accurate without using all of them.

15	Explain how excitation and inhibition are involved in synaptic transmission.	[4 marks]
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Marks for this question: AO1 – 4 marks

Level	Marks	Description
2 Clear	3–4	Clear and accurate knowledge of how excitation and inhibition are involved in synaptic transmission with some detail. Relevant terminology is used consistently throughout. The answer demonstrates a high level of substantiated reasoning, is clear, coherent and focused.
1 Basic	1–2	Limited or muddled knowledge of how excitation and/or inhibition are involved in synaptic transmission is present. Relevant terminology is occasionally used. The answer occasionally demonstrates substantiated reasoning, but may lack clarity, coherence, focus and logical structure.
0	0	No relevant content

Possible content

- Synaptic transmission is how neurons communicate. It's when signals are sent from one neuron to another by neurotransmitters crossing the synaptic gap so they can bind with receptors on the next neuron.
- Excitation is when a neurotransmitter binds with a receptor on the next neuron and increases the neuron's positive charge. This increases the likelihood that the next neuron will fire an electrical impulse.
- Inhibition is when a neurotransmitter binds with a receptor on the next neuron and increases the neuron's negative charge. This decreases the likelihood that the next neuron will fire an electrical impulse.

Credit other relevant content.

16.1	Name one of the lobes of the brain where a language area is located.	[1 mark]
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Marks for this question: AO1 – 1 mark

1 mark for either of the following (MAX 1):

- frontal
- temporal.

These are the **only** accepted responses.

16.2	What is the mode for the decrease in time taken when the speech and language therapy was provided by the trained therapist?	[1 mark]
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Marks for this question: AO2 – 1 mark

Answer – 15

This is the **only** accepted response.

16.3	Calculate the range for the decrease in time taken when the speech and language therapy was provided by the virtual therapist.	[1 mark]
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Marks for this question: AO2 – 1 mark

1 mark for either of the following (MAX 1):

- 40
- 41

These are the **only** accepted responses.

16.4	What percentage of the twenty participants were able to read the text more than 40 seconds faster after six weeks of therapy? Show your workings.	[2 marks]
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Marks for this question: AO2 – 2 marks

2 marks for the correct answer.

1 mark for correct workings but incorrect/no answer.

$$\begin{aligned} &4/20 \times 100 \\ &= 20 \end{aligned}$$

17	Describe and evaluate Tulving's 'gold' memory study.	[6 marks]
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Marks for this question: AO1 – 3 marks and AO3 – 3 marks

Level	Marks	Description
3 Detailed	5–6	<p>AO1: Relevant knowledge and understanding of Tulving's 'gold' memory study is accurate with detail.</p> <p>AO3: Analysis and evaluation of Tulving's 'gold' memory study is effective. Any conclusions drawn are sound and fully expressed.</p> <p>Relevant terminology is used consistently throughout. The answer demonstrates a high level of substantiated reasoning, is clear, coherent and focused.</p>
2 Clear	3–4	<p>AO1: Relevant knowledge and understanding of Tulving's 'gold' memory study is present but there are occasional inaccuracies/omissions.</p> <p>AO3: There may be some effective analysis and evaluation of Tulving's 'gold' memory study. There may be an attempt to draw conclusions.</p> <p>Relevant terminology is occasionally used. The answer occasionally demonstrates substantiated reasoning, but may lack clarity, coherence, focus and logical structure.</p>
1 Basic	1–2	<p>AO1: Knowledge and understanding of Tulving's 'gold' memory study is present but limited.</p> <p>AO3: Analysis and evaluation of Tulving's 'gold' memory study is of limited effectiveness or may be absent. Any attempts to draw conclusions are not always successful or present.</p> <p>Relevant terminology may not be used at all or may be muddled.</p>
0	0	No relevant content.

Possible content

AO1

- Tulving's aim was to find out where activity occurred in the brain when people were experiencing episodic and semantic memories.
- Tulving injected six volunteers with mildly radioactive gold. They had a type of PET scan that measures blood flow in different parts of the brain.
- Each participant's brain activity was watched while they thought about a episodic memory or semantic memory.
- The results of three of the participants weren't used because their results weren't consistent enough. The scans of the others did show clear differences in blood flow patterns.
- When experiencing an episodic memory there was more activity and blood flow in the frontal and temporal lobes. When experiencing a semantic memory there was more activity and blood flow in the parietal and occipital lobes.
- Tulving concluded that semantic and episodic memories are not only different types of memory, but that they also result in different parts of the brain being active.

AO3

- The study was one of the first to use brain scans to study cognitive processes in the living brain.
- Tulving's study used scientific methods and produced objective, unbiased findings.
- Even though the gold was a radioactive isotope, it only had a half-life of 30 seconds so risk to the participants was very small.
- Only three participants had consistent results, so the sample size is very small, and the findings might not apply to everyone.
- It is not possible to make sure that the participants only thought about what they were asked to, so we can't be sure the scan was really measuring a specific type of memory.
- The study was ethical as all the participants were volunteers and had given their informed consent.
- In thinking about a personal experience, there is likely to be a mixture of episodic and semantic memories. This means that more parts of the brain might have been activated than the researcher actually intended.

Credit other relevant content.

NOTE: Methodological issues are creditworthy as long as they are not generic.

Section D

Psychological problems

18.1	Identify the type of correlation the researcher found.	[1 mark]
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Marks for this question: AO2 – 1 mark

Answer – C (Positive correlation)

18.2	State whether the data collected by the researcher was primary or secondary. Explain your answer.	[2 marks]
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Marks for this question: AO2 – 2 marks

1 mark for secondary data.

PLUS

1 mark for an appropriate explanation.

Possible content

- The researcher did not collect the data himself.
- The data came from statistics published by the Office of National Statistics.

Credit other relevant content.

18.3	Outline two weaknesses of correlations.	[4 marks]
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Marks for this question: AO3 – 4 marks

Level	Marks	Description
2 Clear	3–4	<p>Analysis and evaluation of correlations is effective and addresses two weaknesses. Any conclusions drawn are sound and fully expressed.</p> <p>Relevant terminology is used consistently throughout. The answer demonstrates a high level of substantiated reasoning, is clear, coherent and focused.</p>
1 Basic	1–2	<p>Analysis and evaluation of correlations is of limited effectiveness, muddled OR only addresses one weakness. Any attempts to draw conclusions are not always successful.</p> <p>Relevant terminology is occasionally used. The answer occasionally demonstrates substantiated reasoning, but may lack clarity, coherence, focus and logical structure.</p>
0	0	No relevant content.

Possible content

- If a correlation is found, it does not show which of the two variables measured actually caused the relationship to occur.
- Sometimes it is another variable altogether that is the reason for the correlation.
- May lead to false conclusions that one variable causes the other.
- Although finding a correlation may show that variables are related, it does not show why the relationship exists. This inability to be able to show cause and effect limits the conclusions that can be drawn from the results of correlation studies.
- Correlations based on small samples are not very reliable. There needs to be a large amount of data for each variable for a pattern to be seen and the findings to be informative. This can be time-consuming to collect.

Credit other relevant content.

NOTE: If the candidate has outlined more than **two** weaknesses, award marks to the **two** that are clearest and most effective.

19.1	According to the International Classification of Diseases, which three symptoms of unipolar depression was Noah experiencing? [3 marks]
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Marks for this question: AO2 – 3 marks

1 mark for any of the following (MAX 3):

- reduced energy/activity levels/changes in sleep pattern
- low mood
- decreased/reduced self-esteem/ self-confidence.
- loss of interest and enjoyment

19.2	Describe one difference between unipolar depression and bipolar depression. [2 marks]
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Marks for this question: AO1 – 2 marks

Up to **2 marks** for description of one difference between unipolar depression and bipolar depression.

2 marks: a clear and accurate description.

1 mark: a limited or muddled description.

Possible content

- With unipolar depression the mood is continuous while with bipolar it fluctuates.
- People with unipolar depression have a low mood, those with bipolar experience low, normal and manic moods.
- Bipolar depression is a lifelong condition with no known cure. Although unipolar depression can be lifelong and can re-occur, many people do get better.

Credit other relevant content.

NOTE: Answers that **only** address unipolar **OR** bipolar are considered limited or muddled.

NOTE: If the candidate has written about more than one difference, award marks to the **one** that is clearest and most effective.

20	Evaluate one study that has investigated whether or not hereditary factors are a possible explanation for alcohol abuse. <p style="text-align: right;">[4 marks]</p>
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Marks for this question: AO3 – 4 marks

Level	Marks	Description
2 Clear	3–4	Analysis and evaluation of relevant study is effective. Any conclusions drawn are sound and fully expressed. Relevant terminology is used consistently throughout. The answer demonstrates a high level of substantiated reasoning, is clear, coherent and focused.
1 Basic	1–2	Analysis and evaluation of relevant study is of limited effectiveness or muddled. Any attempts to draw conclusions are not always successful. Relevant terminology is occasionally used. The answer occasionally demonstrates substantiated reasoning, but may lack clarity, coherence, focus and logical structure.
0	0	No relevant content.

Possible content

- In Kaij’s Twin Study, the information on alcohol use came from the participant and other family members. This type of self-report method is subjective and there are many reasons why the information provided may not be correct. These include lying about the amount of alcohol consumed in order to give a socially desirable answer.
- Kaij’s sample is limited because all of the participants were twins, male, and Swedish. This means that the findings are not representative of people who are female or who are not twins or Swedish.
- The sample is also limited because the participants were twins where at least one of them was publicly known to abuse alcohol. Therefore, the results are not representative of those who abused alcohol but did so in private.
- Findings from twin studies such as Kaij’s may be limited because identical twins are often brought up in the same way, so it may be the environment (nurture) and not genetics (nature) that was the cause of the comparable rates of alcohol use.
- Although Kaij found that 54% of the identical twins were in the same category as their co-twin for alcohol use, that also means that 46% were not in the same category and that suggests there are not just genetic factors involved in alcohol use.

Credit other relevant content, including other relevant studies.

NOTE: Methodological issues are creditworthy as long as they are not generic.

21.1	<p>You have been asked to research the effectiveness of self-management programmes as an intervention for addiction.</p> <p>Explain how you would use interviews to do this research.</p> <p>You need to include the following information in your answer:</p> <ul style="list-style-type: none"> • who your target population would be • what your sampling method would be and how you would select your sample using this method • an appropriate interview question you could use in your research. <p style="text-align: right;">[4 marks]</p>
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Marks for this question: AO2 – 4 marks

1 mark for an appropriate target population. To be considered appropriate it must clearly include people with an addiction who have some experience of attending a self-management programme.

PLUS

1 mark for a sampling method.

PLUS

1 mark for an appropriate way of carrying out the sampling method. To be considered appropriate it must fit with both the identified target population and the identified sampling method. It does **not** need to be ethical to be creditworthy.

Examples:

Putting up a poster in the doctor's surgery asking for volunteers.

Asking someone you know that attends a self-management programme to help you by asking others from their programme to take part.

PLUS

1 mark for an appropriate interview question.

Examples:

What are you addicted to?

Do you find the self-management programme helpful?

21.2	Identify an appropriate way of dealing with the ethical issue of anonymity in the research you described in 21.1 . [1 mark]
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Marks for this question: AO2 – 1 mark

1 mark for an appropriate way that is relevant to the research described in **21.1**.

Possible content

- I will not ask the participants or any other group members for anyone's names.
- I will not publish any names or identifying information – including where the self-management group meets.
- I will not meet the participants in person – they will complete the interview by telephone.

Credit other relevant content.

22	Evaluate self-management programmes as an intervention for addiction.	[4 marks]
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Marks for this question: AO3 – 4 marks

Level	Marks	Description
2 Clear	3–4	Analysis and evaluation of self-management programmes as an intervention for addiction is effective. Any conclusions drawn are sound and fully expressed. Relevant terminology is used consistently throughout. The answer demonstrates a high level of substantiated reasoning, is clear, coherent, and focused.
1 Basic	1–2	Analysis and evaluation of self-management programmes as an intervention for addiction is of limited effectiveness or muddled. Any attempts to draw conclusions are not always successful. Relevant terminology is occasionally used. The answer occasionally demonstrates substantiated reasoning, but may lack clarity, coherence, focus and logical structure.
0	0	No relevant content.

Possible content

- Some research suggests that there is no significant difference in the success rate of these programmes and other available treatments.
- Self-management programmes work best when attended regularly and for a long time.
- There is research suggesting the dropout rate for self-management programmes is between 40% and 60%.
- People need to be willing to share their personal experiences and emotions with others. This type of intervention may not appeal to everyone.
- Self-management programmes are holistic. They help people address their need to use a substance as well as considering reasons people became addicted.
- Control groups cannot be used for ethical and methodological reasons which limits the scientific rigour of research into effectiveness.

Accept other creditworthy answers such as comparisons with aversion therapy and other treatments.