

Markscheme

May 2025

Psychology

Higher level

Paper 1

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Section A markbands

Marks	Level descriptor
0	The answer does not reach a standard described by the descriptors below.
1–3	• The response is of limited relevance to or only rephrases the question. • Knowledge and understanding is mostly inaccurate or not relevant to the question. • The research supporting the response is mostly not relevant to the question and if relevant only listed.
4–6	• The response is relevant to the question, but does not meet the command term requirements. • Knowledge and understanding is accurate but limited. • The response is supported by appropriate research which is described.
7–9	• The response is fully focused on the question and meets the command term requirements. • Knowledge and understanding is accurate and addresses the main topics/problems identified in the question. • The response is supported by appropriate research which is described and explicitly linked to the question.

Section A

Biological approach to understanding behaviour

1. With reference to **one** relevant study, explain the effect of **one** agonist **or one** antagonist on behaviour.

[9]

Refer to the paper 1 section A markbands when awarding marks.

The command term “explain” requires candidates to give a detailed account, including reasons or causes, of the effect of one agonist or one antagonist on behaviour, with reference to one relevant study.

Candidates may either use an example of an endogenous agonist, such as a neurotransmitter, or an exogenous agonist, such as a drug.

Relevant studies may include, but are not limited to:

- Antonova et al (2011); Rogers and Kesner (2003) – scopolamine and its effects on spatial memory consolidation
- Martinez and Kesner (1991) – physostigmine as an ACh agonist and scopolamine as an ACh antagonist in the consolidation of spatial memory
- Leyton (2013) – alcohol as a dopamine agonist and increased activity in the nucleus accumbens
- Romach et al (1999) – using a dopamine antagonist (ecopipam) to treat cocaine addiction
- Crockett et al (2010) – SSRIs as a serotonin agonist in the study of prosocial behaviour.

If a candidate explains the effect of one agonist or antagonist without reference to a relevant study, award up to a maximum of [5].

If a candidate addresses a relevant study but does not explain the effect of one agonist or antagonist, award up to a maximum of [4].

If a candidate explains the effect of more than one agonist or antagonist, credit should be given only to the first agonist or antagonist.

If a candidate refers to more than one study, credit should be given only for the first study.

Cognitive approach to understanding behaviour

2. Describe the working memory model with reference to **one** relevant study. **[9]**

Refer to the paper 1 section A markbands when awarding marks.

The command term “describe” requires candidates to give a detailed account of the working memory model with reference to one relevant study.

Components of the working memory model include:

- Central Executive
- Phonological loop: articulatory control system and phonological store
- Visuo-spatial sketchpad
- Episodic buffer

Relevant studies may include, but are not limited to:

- Baddeley and Hitch’s (1976) study using the dual task technique
- Baddeley et al.’s (1975) study using the word length effect
- Landry and Bartling’s (2011) study using articulatory suppression
- Quinn and McConnel’s (1996) study distinguishing visuo-spatial sketchpad and phonological loop
- Conrad and Hull’s (1964) study investigating the phonological similarity effect.
- Studies of brain damage to support the theory: Warrington and Shallice’s (1974) study of KF.

Although candidates may include a drawing of the model, only the written description of the model should be assessed.

If a candidate describes the working memory model without making reference to a relevant study, up to a maximum of **[5]** should be awarded.

If a candidate only describes a relevant study without describing the working memory model, up to a maximum of **[4]** should be awarded.

If a candidate refers to more than one study, credit should be given only for the first study.

Sociocultural approach to understanding behaviour

3. Explain **one** effect of enculturation on human cognition and/or behaviour with reference to **one** relevant study. **[9]**

Refer to the paper 1 section A markbands when awarding marks.

The command term “explain” requires candidates to give a detailed account, including reasons or causes, for how enculturation affects cognition and/or behaviour, with reference to one relevant study.

The focus of the response should be on one effect of enculturation – in other words, how learned cultural norms affect cognition and/or behaviour.

Relevant effects of enculturation may include, but are not limited to:

- Effects on parenting behaviours through the enculturation of gender roles: Fagot et al. (1974); Barry (1959)
- Effects on memory: Demorest et al (2008) on musical memory; Martin and Halverson (1983) on reconstructive memory; Kearins (1981) on memory strategies among indigenous Australians; Cole and Scribner (1974) on memory strategies and schooling
- Effects on conformity: Berry and Katz (1967)
- Effects on impulsivity: Lamm et al.’s (2017) marshmallow study of self-control in German versus Cameroonian children; Chen et al.’s (2005) study of online shopping behaviour
- Effects on learning: Odden and Rochat (2004) on enculturation of fishing, household chores and the hierarchical system in Samoa.

If a candidate explains one effect of enculturation on human cognition and/or behaviour without reference to a relevant study, up to a maximum of **[5]** should be awarded.

If a candidate describes a relevant study without explaining an effect of enculturation on human cognition and/or behaviour, up to a maximum of **[4]** should be awarded.

If a candidate explains more than one effect of enculturation on human cognition and/or behaviour, credit should be given only to the first one.

If a candidate refers to more than one study, credit should be given only for the first study.

Section B assessment criteria

A — Focus on the question

To understand the requirements of the question students must identify the problem or issue being raised by the question. Students may simply identify the problem by restating the question or breaking down the question. Students who go beyond this by **explaining** the problem are showing that they understand the issues or problems.

Marks	Level descriptor
0	Does not reach the standard described by the descriptors below.
1	Identifies the problem/issue raised in the question.
2	Explains the problem/issue raised in the question.

B — Knowledge and understanding

This criterion rewards students for demonstrating their knowledge and understanding of specific areas of psychology. It is important to credit **relevant** knowledge and understanding that is **targeted** at addressing the question and explained in sufficient detail.

Marks	Level descriptor
0	Does not reach the standard described by the descriptors below.
1–2	The response demonstrates limited relevant knowledge and understanding. Psychological terminology is used but with errors that hamper understanding.
3–4	The response demonstrates relevant knowledge and understanding but lacks detail. Psychological terminology is used but with errors that do not hamper understanding.
5–6	The response demonstrates relevant, detailed knowledge and understanding. Psychological terminology is used appropriately

C — Use of research to support answer

Psychology is evidence based so it is expected that students will use their knowledge of research to support their argument. There is no prescription as to which or how many pieces of research are appropriate for their response. As such it becomes important that the research selected is **relevant** and useful in **supporting** the response. One piece of research that makes the points relevant to the answer is better than several pieces that repeat the same point over and over.

Marks	Level descriptor
0	Does not reach the standard described by the descriptors below.
1–2	Limited relevant psychological research is used in the response. Research selected serves to repeat points already made.
3–4	Relevant psychological research is used in support of the response, and is partly explained. Research selected partially develops the argument.
5–6	Relevant psychological research is used in support of the response and is thoroughly explained. Research selected is effectively used to develop the argument.

D — Critical thinking

This criterion credits students who demonstrate an inquiring and reflective attitude to their understanding of psychology. There are a number of areas where students may demonstrate critical thinking about the knowledge and understanding used in their responses and the research used to support that knowledge and understanding.

The areas of critical thinking are:

- research design and methodologies
- triangulation
- assumptions and biases
- contradictory evidence or alternative theories or explanations
- areas of uncertainty.

These areas are not hierarchical and not all areas will be relevant in a response. In addition, students could demonstrate a very limited critique of methodologies, for example, and a well-developed evaluation of areas of uncertainty in the same response. As a result, a holistic judgement of their achievement in this criterion should be made when awarding marks.

Marks	Level descriptor
0	Does not reach the standard described by the descriptors below.
1–2	There is limited critical thinking and the response is mainly descriptive. Evaluation or discussion, if present, is superficial.
3–4	The response contains critical thinking, but lacks development. Evaluation or discussion of most relevant areas is attempted but is not developed.
5–6	The response consistently demonstrates well developed critical thinking. Evaluation and/or discussion of relevant areas is consistently well developed.

E — Clarity and organisation

This criterion credits students for presenting their response in a clear and organized manner. A good response would require no re-reading to understand the points made or the train of thought underpinning the argument.

Marks	Level descriptor
0	Does not reach the standard described by the descriptors below.
1	The answer demonstrates some organization and clarity, but this is not sustained throughout the response.
2	The answer demonstrates organization and clarity throughout the response.

Section B

4. With reference to research investigating genetics, discuss the value of animal models for providing insight into human behaviour. **[22]**

Refer to the paper 1 section B assessment criteria when awarding marks.

The command term “discuss” requires candidates to offer a considered review of the value of animal models to provide insight into human behaviour with reference to research investigating genetics.

Research may include, but is not limited to:

- Cases et al. (1995); Mosienko et al. (2012), Van Oortmerssen and Bakker 's (1981) studies of aggression in mice
- Farooqi and Rahilly (2006); Friedman (1950) studies of obesity in rats
- Shmelkov et al.'s (2010) study of OCD in mice
- Weaver et al.'s (2005) study of stress in mice
- Xu et al.'s (2015) study on depression and the 5-HTT gene in macaque monkeys.

Discussion points may include, but are not limited to:

- Methodological considerations
- Justifications for using animals over human participants in research
- Generalizability of animal research
- Operationalization of variables in animal research
- Applications of animal findings
- Assumptions and biases
- Alternatives to animal research
- Issue of reductionism
- Ethical considerations.

5. Evaluate **one or more** studies investigating reconstructive memory.

[22]

Refer to the paper 1 section B assessment criteria when awarding marks.

The command term “evaluate” requires candidates to make an appraisal by weighing up the strengths and limitations of one or more studies investigating reconstructive memory. Although a discussion of both strengths and limitations is required, it does not have to be evenly balanced to gain high marks.

Relevant studies include, but are not limited to:

- Loftus and Pickrell’s (2002) study in the creation of false memories
- Loftus and Palmer’s (1974) study of eyewitness testimony
- Bartlett’s (1932) “War of Ghosts” study of schema processing
- Yuille and Cutshall’s (1986) study of the effect of leading questions on eye-witnesses to a real crime

Evaluation may include, but is not limited to:

- methodological considerations – why the method/methods was/were selected and the appropriateness of the method(s) including strengths and limitations of the study/studies
- gender/cultural considerations
- possible theoretical assumptions and/or biases in relation to the chosen method(s) in the study/studies
- the issues of validity and reliability
- the generalizability of findings
- contradictory findings
- ethical considerations
- implications and practical application of the findings.

Candidates may evaluate one study to demonstrate depth of knowledge, or may evaluate more than one study to demonstrate breadth of knowledge. Both approaches are equally acceptable.

If the candidate addresses only strengths or only limitations, the response should be awarded up to a maximum of **[3]** for criterion D: critical thinking. All remaining criteria should be awarded marks according to the best fit approach.

6. Evaluate social identity theory.

[22]

Refer to the paper 1 section B assessment criteria when awarding marks.

The command term “evaluate” requires candidates to make an appraisal by weighing up the strengths and limitations of social identity theory. Although a discussion of both strengths and limitations is required, it does not have to be evenly balanced to gain high marks.

The key concepts of social identity theory presented may include, but are not limited to:

- social categorization (in-groups/out-groups)
- social identification
- social comparison
- positive distinctiveness.

Relevant studies may include but are not limited to:

- Tajfel’s (1971) studies on social groups and identities
- Sherif et al.’s (1961) Robbers Cave study
- Cialdini et al.’s (1976) Basking in Reflected Glory study
- Abrams’s (1990) study of the role of social identity on levels of conformity
- Maass’s (2003) study of the role of social identity on violence
- Drury et al.’s (2009); Levine et al.’s (2005) studies of helping behaviour
- Park and Rothbart’s (1982) study on outgroup homogeneity in sororities.

Evaluation may include, but is not limited to:

- the effectiveness of the theory in explaining behaviour
- the usefulness of the theory in generating psychological research
- methodological, cultural and gender considerations
- supporting and/or contradictory findings or explanations
- applications of the theory.

If the candidate addresses only strengths or only limitations, the response should be awarded up to a maximum of **[3]** for criterion D: critical thinking.

The focus of the response should be on the evaluation of the theory. If a candidate only evaluates relevant studies, the response should be awarded up to a maximum of **[3]** for criterion D: critical thinking.
