

Markscheme

May 2023

Psychology

Standard level

Paper 1

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Section A markbands

Marks	Level descriptor
0	<ul style="list-style-type: none"> The answer does not reach a standard described by the descriptors below.
1–3	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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. Explain **one** evolutionary explanation for 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, of one evolutionary explanation of behaviour, with reference to one relevant study.

Evolutionary explanations are based on assumptions such as, but not limited to, the following:

- the basic principles of natural selection (adaptation)
- human behaviours may be inherited
- the mechanism of sexual selection; increasing the fitness of one's offspring
- inclusive fitness
- parental investment theory – the sex with higher obligatory investment will be more selective in choosing sex partners

Relevant research could include, but is not limited to:

- Fessler *et al.* (2006) or Curtis (2004) on natural selection and disgust
- Ekman and Friesen's (1971) study on universality of emotional expressions
- Raison and Miller's (2012) Pathogen Host Defence Hypothesis and depression
- Mineka and Cook (1989) on biological preparedness and phobias
- Madsen's (2007) study on altruism
- Buss *et al.*'s (1990) study on sexual selection and mate selection.
- Wedekind's (1995) study on natural selection and the role of MHC in mate selection.

If a candidate explains more than one evolutionary explanation, credit should be given only to the first explanation.

If a candidate only describes an appropriate study without outlining an evolutionary explanation, up to a maximum of **[4]** should be awarded.

If a candidate explains an evolutionary explanation without making reference to a study, up to a maximum of **[5]** should be awarded.

Cognitive approach to understanding behaviour

2. Describe schema theory, 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 schema theory, with reference to one relevant study.

Candidates may refer to relevant concepts such as, but not limited to:

- mental representation/framework of knowledge based on past experience
- assimilation and accommodation (Piaget)
- reconstructive memory
- the role of schema in the encoding and retrieval of memory
- schema types.

Relevant studies could include but are not limited to:

- Bartlett’s (1932) study of “War of the Ghosts”
- Anderson & Pichert’s (1978) study on schema theory and memory retrieval
- Bower, Black and Turner’s (1979) study on the effects of scripts in comprehension and memory
- Brewer & Treyens’ (1981) study of potential effects of schema on memory
- Bransford and Johnson’s (1972) study on schemas influencing encoding
- Darley and Gross’s (1983) study on effects of social schemas
- Loftus and Palmer (1974) on schema and the misinformation effect

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

If a candidate describes schema theory without making reference to a study, up to a maximum of **[5]** should be awarded.

If a candidate only describes an appropriate study without describing schema theory, up to a maximum of **[4]** should be awarded.

Sociocultural approach to understanding behaviour

3. Describe **one** cultural dimension, 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 one cultural dimension with reference to one relevant study.

Cultural dimensions may include, but are not limited to:

- individualism versus collectivism (for example, Chen *et al.*, 2005; Berry, 1967)
- power/ distance (for example, Zhang *et al.*, 2010; Eylon and Au, 1999; Lynn *et al.*, 1993)
- long-term versus short-term orientation (Confucian Work Dynamism) (for example, Hofstede and Bond, 1988)
- masculinity versus femininity (for example, Vunderick and Hofstede, 1998)
- uncertainty avoidance (for example, Shane, 1995).

Responses should present the core traits that define the chosen cultural dimension. For example, candidates may describe individualistic societies' focus on uniqueness, achievement and freedom, whereas collectivistic societies focus on family, relationships and a common fate or heritage.

If a candidate describes more than one cultural dimension, credit should be given only to the first description.

If a candidate describes one cultural dimension without reference to a relevant study, up to a maximum of [5] should be awarded.

If a candidate describes a relevant study without describing the cultural dimension, up to a maximum of [4] should be awarded.

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. Discuss **one or more** hormones and their effects on 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 how one or more hormones affect behaviour.

Relevant hormones may include, but are not limited to: adrenaline, cortisol, melatonin, testosterone, oestrogen, oxytocin.

Any aspect of human behaviour (for example, aggression, depression, attachment) is acceptable as long as the response focuses on how the hormone influences the particular behaviour

Examples of how hormones influence human behaviour could include, but are not limited to the influence of:

- cortisol on recall
- oxytocin on trust and social bonding
- adrenaline on memory
- testosterone on aggression.

Possible studies include, but are not limited to:

- Radke et al.’s (2015) study investigating the effects of testosterone on women’s responses to angry faces
- McGaugh and Cahill’s (1995) study on adrenaline and memory
- Newcomer et al.’s (1999) study on cortisol and memory
- Baumgartner et al.’s (2008) study on the role of oxytocin on trust in economic behaviour.

Discussion points may include, but are not limited to:

- examining underlying assumptions
- the validity of evidence in support of the explanation
- strengths and limitations of the research
- the difficulties of carrying out empirical research
- the debate of generalizing from animals to human behaviour
- strengths and limitations of a reductionist argument.

Candidates may discuss one hormone in order to demonstrate depth of knowledge, or may discuss a larger number of hormones in order to demonstrate breadth of knowledge. Both approaches are equally acceptable.

5. Discuss **one or more** ethical considerations in studying reliability of **one or more** cognitive processes.

[22]

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

The command term “discuss” requires candidates to give a considered review of one or more ethical considerations related to studying the reliability of one or more cognitive processes.

Cognitive processes include memory, thinking and decision-making.

Ethical considerations may include, but are not limited to:

- anonymity / confidentiality
- debriefing
- deception
- informed consent
- right to withdraw
- undue stress or harm

Relevant studies may include but are not limited to:

- Loftus and Palmer’s (1974) study on reconstructive memory in relation to eyewitness testimony
- Loftus and Pickerell’s (1995) Lost in a Shopping Mall study investigating false memories
- Yuille and Cutshall’s (1986) study on stress and eyewitness testimony
- Brewer and Treyen’s (1981) office schema study on reconstructive memory
- Bartlett’s (1932) study of “War of the Ghosts”
- Talarico and Rubin’s (2003) study on 9/11 flashbulb memory
- Bahrick et al. (1975) – duration of long term memory
- Neisser and Harsch’s (1992) study on the Challenger disaster and false recollections.
- Tversky and Kahneman’s (1974) study on heuristics and biases.

Discussion may include, but is not limited to:

- the cost-benefit analysis
- how ethical considerations may influence how studies are designed
- deception as a control for demand characteristics
- the role of “right to withdraw” on sample attrition and sample size
- the difficulties of ensuring confidentiality in psychology research
- the role of informed consent when studying groups
- decisions as to why certain ethical guidelines were/were not followed
- changes over time in adherence to ethical standards/guidelines.

If only one study is presented, and it is not relevant to the reliability of one or more cognitive processes, award **[0]** for Criterion C: use of research to support answer.

6. To what extent can acculturation affect human cognition and/or behaviour? [22]

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

The command term “to what extent” requires candidates to consider the merits, contributions or otherwise of the extent to which acculturation affects human cognition and/or behaviour. This may be positive and/or negative.

Responses should consider the limitations of drawing conclusions about the role of acculturation.

Acculturation is the process by which people change as a result of contact with other cultures in order to assimilate with a new culture.

Human cognition and/or behaviours resulting from acculturation strategies may include, but are not limited to:

- acculturative stress and coping
- conformity
- health and obesity
- culture learning
- social identification.

Relevant research may include, but is not limited to:

- Lueck and Wilson’s (2010) study on predicting acculturative stress in Asian immigrants and Asian Americans
- Wang et al.’s (2010) study on dimensions on acculturation and positive psychological functioning in Cuban American university students
- Shah et al. (2015), Delavario et al. (2013), Ishizawa and Jones (2016), Da Costa, Dias and Martins (2016), and Esteban-Gonzalo et al.’s (2015) research into obesity
- Kraeh et al.’s (2016) study on the mental health of North Korean refugees living in Seoul
- Miranda and Matheny’s (2000) study on socio-psychological predictors of acculturative stress among Latino adults
- Berry et al.’s (1987) study on acculturative stress.
- Torres et al.’s (2012) study on the correlation of integration and disorientation in Latino-Americans

Considerations may include, but are not limited to:

- methodological and ethical considerations related to research into acculturation
 - how the findings of research have been interpreted and applied
 - implications of the findings
 - the accuracy and clarity of the concepts
 - assumptions and biases
 - areas of uncertainty
 - supporting and/or contradictory evidence
 - alternative explanations or factors.
-