

Markscheme

November 2023

Psychology

Higher 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. Describe the role of **one** hormone in the study of human behaviour, 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 role of one hormone in human behaviour.

Responses should make a clear link between the role of the hormone(s) and human behaviour. Examples of how hormones influence human behaviour could include, but are not limited to:

- Radke *et al.*'s (2015) study investigating the effects of testosterone on aggression
- 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
- Ronay and von Hippel's (2010) study on testosterone and risk taking.

If a candidate describes the role of more than one hormone, credit should be given only to the first hormone described.

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

If a candidate describes the role of one hormone without making reference to a study, up to a maximum of [5] should be awarded.

If a candidate only describes a relevant study without describing the role of the hormone in the study of human behaviour, up to a maximum of [4] should be awarded.

Responses referring to research conducted on animals are acceptable as long as they are linked to human behaviour.

Cognitive approach to understanding behaviour

2. With reference to **one** relevant study, describe the effect of emotion on **one** cognitive process. **[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 effect of emotion on one cognitive process with reference to one relevant study.

Responses may focus on any cognitive process that is affected by emotion, for example, memory or decision-making.

Relevant studies may include, but are not limited to:

- Brown and Kulik’s (1977), Neisser and Harsh’s (1992) studies related to flashbulb memory
- Yuille and Cutshall’s (1986) study on emotion and accuracy of flashbulb memories
- Nutt and Lam’s (2011), Fisher and Craik’s (1977) studies of state-dependent memory
- Bechara et al.’s (1999); Denes-Raj and Epstein’s (1994) studies of emotion and decision-making
- McGaugh and Cahill’s (1995) study on the role of emotion in the creation of memories.

If a candidate addresses more than one cognitive process, credit should be given only to the first cognitive process described.

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

If a candidate addresses the effect of emotion on one cognitive process without including a relevant study, a maximum of **[5]** should be awarded for the response.

If a candidate describes a relevant study but does not describe the effect of emotion on one cognitive process, up to a maximum of **[4]** should be awarded.

Sociocultural approach to understanding behaviour

3. Describe **one** research method used in **one** study related to cultural origins of behaviour and/or cultural origins of cognition. **[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 research method used in one study related to cultural origins of behaviour and/or cultural origins of cognition.

In order to address the cultural origins of behaviour and/or cognition, candidates may describe research on cultural dimensions, enculturation, acculturation, or globalization.

Relevant research methods may include, but are not limited to:

- Naturalistic observations: Fagot (1974)
- Quasi-experiments: Berry (1967) on conformity; Cole & Scribner (1974) on chunking in memory; Kearins (1981) on memory
- Questionnaires: Parker et al (2001) on abnormal behaviour; Kulkofsky et al. (2011) on flashbulb memory.

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

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

If a candidate describes a research method 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 a research method, 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 how animal research may provide 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 contribution of animal research in the understanding of human behaviour.

Responses may highlight that animal research has been a major contributor to our understanding of many aspects of human behaviour such as:

- attachment: for example, Harlow (1958, 1971, 1975)
- health behaviour: Alexander's (1981) Rat Park study of addiction; Friedman (1995) on ghrelin and obesity
- learning and memory: for example, Meaney's (1988) study on the role of glucocorticoids in memory; Rogers and Kesner's (2003) study on the role of acetylcholine in the formation of spatial memory
- mental health disorders: for example, Shmelkov et al. (2010) on the SLITRK5 gene and OCD; Seligman (1970) on helplessness in depression
- sensory processes: for example, Held and Hein's "Kitten Carousel" (1963), Blakemore and Cooper's (1970) studies on perception
- stress: for example, Selye (1956, 1976), Brady's "Executive Monkey" (1959).

Discussion may include, but is not limited to:

- alternatives to animal research
- justifications for using animals over human participants in research
- key differences between animal and human physiology and behaviour
- methodological considerations and generalizability of animal research
- operationalization of variables in animal research (e.g. studies of mental disorders in animal research)
- the issue of reductionism.

5. Evaluate **one or more** studies regarding the positive and/or negative influence of technologies on cognitive processes.

[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 the positive and/or negative influence of technologies on cognitive processes.

Candidates may refer to studies investigating one or more specific cognitive processes (such as memory, thinking and decision-making, perception, attention and/or language) or studies which focus on cognitive processes in general. Both approaches are equally acceptable.

Studies may include, but are not limited to:

- Sparrow *et al.*’s (2011) study on transactive memory
- Rosen *et al.*’s (2011, 2013) studies on the effect of multi-tasking on memory recall
- Mueller and Oppenheimer’s (2014) on computer-assisted notetaking and memory
- Storm *et al.*’s (2016) study on the Google effect
- Blacker *et al.*’s (2014) study on the effect of video games on visual working memory
- Swing *et al.*’s (2010) study on the effect of screen time on attention
- Tun and Lachman’s (2010) interview investigating computer use and cognitive performance
- Uttal *et al.*’s (2013) meta-analysis of studies on spatial skills.

Evaluation points may include, but are not limited to:

- balance between ecological and internal validity
- how the findings of research have been interpreted and applied
- issues of research bias
- generalizability of research
- strengths and weaknesses of the research method
- implications of the findings.

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

6. Discuss how globalization may influence 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 influence of globalization on behaviour.

Behaviour in this instance may include attitudes, identities or any other accepted behaviour. Relevant research may include, but is not limited to:

- Ogihara & Uchida (2014) on the effects of globalization on subjective well-being
- Norasakkunkit & Uchida (2014); Becker *et al.* (2002) on the effects of globalization on mental health
- Buchan *et al.* (2009) on globalization and cooperation
- Adams (2003) on cultural values in the USA and Canada converging over time
- Gupta’s (2011) research on the effect of globalization in consumer behaviour
- Jensen, Arnett and McKenzie’s (2011) research on globalization and cultural identity.

Candidates may discuss acculturation to the global culture or the role of contact with other cultures as a means of changing local culture; however, it is not relevant to discuss acculturation research based on immigrants moving to a new culture and the level to which one assimilates to the culture of a new country.

Discussion may include, but is not limited to:

- methodological difficulties in measuring and testing the effect of globalization.
 - the inability to establish a cause-and-effect relationship
 - studies of the effects of globalization are relatively recent, that is, not replicated
 - implications of the findings
 - the difficulty of generalizing the findings of such studies
 - methodological issues with the research methods utilized.
 - cultural considerations in the effects of globalization
 - an emic versus etic approach.
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