

Markscheme

November 2019

Psychology

Higher level

Paper 1

No part of this product may be reproduced in any form or by any electronic or mechanical means, including information storage and retrieval systems, without written permission from the IB.

Additionally, the license tied with this product prohibits commercial use of any selected files or extracts from this product. Use by third parties, including but not limited to publishers, private teachers, tutoring or study services, preparatory schools, vendors operating curriculum mapping services or teacher resource digital platforms and app developers, is not permitted and is subject to the IB's prior written consent via a license. More information on how to request a license can be obtained from <http://www.ibo.org/contact-the-ib/media-inquiries/for-publishers/guidance-for-third-party-publishers-and-providers/how-to-apply-for-a-license>.

Aucune partie de ce produit ne peut être reproduite sous quelque forme ni par quelque moyen que ce soit, électronique ou mécanique, y compris des systèmes de stockage et de récupération d'informations, sans l'autorisation écrite de l'IB.

De plus, la licence associée à ce produit interdit toute utilisation commerciale de tout fichier ou extrait sélectionné dans ce produit. L'utilisation par des tiers, y compris, sans toutefois s'y limiter, des éditeurs, des professeurs particuliers, des services de tutorat ou d'aide aux études, des établissements de préparation à l'enseignement supérieur, des fournisseurs de services de planification des programmes d'études, des gestionnaires de plateformes pédagogiques en ligne, et des développeurs d'applications, n'est pas autorisée et est soumise au consentement écrit préalable de l'IB par l'intermédiaire d'une licence. Pour plus d'informations sur la procédure à suivre pour demander une licence, rendez-vous à l'adresse <http://www.ibo.org/fr/contact-the-ib/media-inquiries/for-publishers/guidance-for-third-party-publishers-and-providers/how-to-apply-for-a-license>.

No se podrá reproducir ninguna parte de este producto de ninguna forma ni por ningún medio electrónico o mecánico, incluidos los sistemas de almacenamiento y recuperación de información, sin que medie la autorización escrita del IB.

Además, la licencia vinculada a este producto prohíbe el uso con fines comerciales de todo archivo o fragmento seleccionado de este producto. El uso por parte de terceros —lo que incluye, a título enunciativo, editoriales, profesores particulares, servicios de apoyo académico o ayuda para el estudio, colegios preparatorios, desarrolladores de aplicaciones y entidades que presten servicios de planificación curricular u ofrezcan recursos para docentes mediante plataformas digitales— no está permitido y estará sujeto al otorgamiento previo de una licencia escrita por parte del IB. En este enlace encontrará más información sobre cómo solicitar una licencia: <http://www.ibo.org/es/contact-the-ib/media-inquiries/for-publishers/guidance-for-third-party-publishers-and-providers/how-to-apply-for-a-license>.

Section A markbands

| Marks | Level descriptor |
|--------------|---|
| 0 | 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 neuroplasticity, 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 neuroplasticity with reference to one relevant study. Descriptions of neuroplasticity may show conceptual understanding of long-term potentiation, neurogenesis and/or synaptic pruning.

Responses should describe neuroplasticity indicating how the neural connections in the brain change with regard to a specific behaviour or cognitive process. Animal research is acceptable.

Relevant studies could include but are not limited to:

- Rosenzweig, Bennett and Diamond’s (1972) study on the role of environmental factors on neuroplasticity
- Bremner *et al.*’s (2008) study on plasticity of the human brain in post-traumatic stress disorder
- Dragansky’s (2004) study of neuroplasticity in jugglers
- Maguire *et al.*’s (2000) study on navigation (related structural change in the hippocampi of taxi drivers)
- Tierney *et al.*’s (2001) study using PET scans to investigate language development.

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

If a candidate describes a relevant study, but neuroplasticity is not addressed, apply the markbands up to a maximum of [4].

If a candidate describes neuroplasticity but does not describe an appropriate study, apply the markbands up to a maximum of [5].

Cognitive approach to understanding behaviour

2. Describe **one** study related to **one** model of memory. **[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 study related to one model of memory. The description of the study should include the aim, procedure and findings of the chosen study.

Appropriate models of memory may include, but are not limited to:

- Flashbulb memory
- Levels of Processing Model.
- Multi-Store Model of Memory
- Schema theory
- Working Memory Model

Relevant studies could include but are not limited to:

- Baddely and Hitch’s (1974) study on the Working Memory Model
- Bartlett’s (1924) study of the effect of schema on memory storage
- Craik and Lockhart’s (1972) study on the Levels of Processing Model.
- Glanzer and Cunitz’s (1966) study on the primacy and recency effects in free recall
- Milner’s (1966) case study of HM.

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

If a candidate describes an appropriate model of memory but does not refer to a relevant study, apply the markbands up to a maximum of **[4]**.

Sociocultural approach to understanding behaviour

3. Outline social cognitive theory with reference to **one** relevant study. **[9]**

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

The learning outcome “outline” requires candidates to give a brief account of social cognitive theory in relation to one relevant study.

The main aspects of social cognitive theory include:

- imitation of role models
- the role of attention, retention, motivation and reproduction.
- self-efficacy
- vicarious learning

Responses may refer to studies such as, but not limited to:

- Bandura *et al.*'s studies on aggression
- Joy, Kimball and Zabrack (1986) on aggression from television viewing
- Totten's (2003) study on modelling of violent behaviour towards girlfriends
- Sprafkin *et al.*'s (1975) study on children's prosocial behaviour and television model
- Fagot *et al.*'s (1992) study on parental influences on gender development.

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

If a candidate outlines social cognitive theory without making reference to a relevant study, up to a maximum of **[5]** should be awarded.

If a candidate describes a relevant study without outlining social cognitive theory, 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** evolutionary explanation of **one** 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 one evolutionary explanation of one behaviour.

Relevant behaviour that could be discussed includes, but is not limited to:

- human mating behaviours (Buss, 1990)
- emotions (for example, disgust, Fessler, 2006; universality of emotional expressions, Ekman and Frieson, 1971)
- abnormal behaviour (for example, depression, Andrews and Thompson, 2009; phobias, Seligman, 1971)
- prosocial behaviour (Dawkins, 1976).

Discussion points may include, but are not limited to:

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

Candidates may discuss a specific emotional or dysfunctional behaviour such as disgust or depression or may discuss emotional or dysfunctional behaviour in general. Both approaches are equally acceptable.

If a candidate addresses more than one specific behaviour, credit should be given only to the first behaviour addressed.

If a candidate addresses more than one evolutionary explanation of behaviour, credit should be given only to the first discussion. However, candidates may address other explanations of the same behaviour and be awarded marks for these as long as they are clearly used to discuss the evolutionary explanation addressed in the response.

5. Discuss **two or more** ethical considerations related to **one** study investigating the reliability of **one** cognitive process. **[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 ethical considerations related to one study investigating the reliability of one cognitive process.

Cognitive processes may include, but are not limited to, memory, thinking and decision-making.

Ethical considerations may include, but are not limited to:

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

The reliability of a cognitive process is the extent to which it is open to distortion. Some schema studies are appropriate (eg Bartlett’s (1932) War of the Ghosts), whereas others do not address distortion (eg Bransford and Johnson, 1972).

Relevant studies may include but are not limited to:

- Brown and Kulik’s (1977) study on flashbulb memory
- Loftus and Palmer’s (1974) study on reconstructive memory in relation to eyewitness testimony
- Tversky and Kahneman’s (1974) study on heuristics and biases.
- Yuille and Cutshall’s (1986) study on stress and eyewitness testimony

Discussions may include, but are not limited to:

- The justification of how ethical considerations were resolved – for example, why was deception used?
- How ethical considerations may limit the ability to carry out research
- Why ethical considerations are important – for example, with regard to a specific study, why is the anonymity of the participants important?
- Using a cost/benefit analysis when undertaking research
- How ethical considerations/guidelines have changed over time.

If a candidate only discusses one ethical consideration, the response should be awarded up to a maximum of **[3]** for criterion B: knowledge and understanding. All remaining criteria should be awarded marks according to the best fit approach.

If a candidate uses a study that is not relevant to the reliability of one cognitive process, then [0] should be awarded for criterion C. All remaining criteria should be awarded marks according to the best fit approach.

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

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

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:

- Adams (2003) on cultural values in the USA and Canada converging over time
- Buchan *et al.* (2009) on globalization and cooperation
- Gupta’s (2011) research on the effect of globalization in consumer behaviour
- Jensen, Arnett and McKenzie’s (2011) research on globalization and cultural identity, which explains that globalization has fostered the occurrence of a new period of life, *emerging adulthood*, related to issues of identity
- 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.

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 and often have not been replicated
 - the difficulty of generalizing the findings of such studies
 - the reliance on self-reported data is open to demand characteristics.
-