

# Markscheme

May 2015

Psychology

Higher level and standard level

Paper 1

This markscheme is **confidential** and for the exclusive use of examiners in this examination session.

It is the property of the International Baccalaureate and must **not** be reproduced or distributed to any other person without the authorization of the IB Assessment Centre.

## Section A

### Biological level of analysis

1. Describe **one** evolutionary explanation of **one** behaviour.

[8]

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

The command term “describe” requires candidates to give a detailed account of one evolutionary explanation of one behaviour. An evolutionary explanation of behaviour should be based on Darwin’s theory of natural selection or sexual selection.

Evolutionary explanations may include, but are not limited to:

- mating behaviours (Wedekind, 1995; Buss, 1990)
- emotions; for example, disgust (Fessler, 2006)
- dysfunctional behaviour; for example, phobias (Seligman, 1971)
- altruism (Dawkins, 1976).

If a candidate describes more than one explanation, or more than one behaviour, credit should be given only to the first explanation, or the first behaviour.

If a candidate describes a study of genetic influence rather than an evolutionary explanation, but attempts to link it to the evolution of behaviour, up to a maximum of **[3]** should be awarded.

If a candidate only describes an appropriate study without clearly describing the evolutionary explanation, up to a maximum of **[3]** should be awarded.

If a candidate only describes Darwin’s theory of natural selection or sexual selection without linking it to a specific behaviour, up to a maximum of **[3]** should be awarded.

### Section A markbands

Marks	Level descriptor
0	The answer does not reach a standard described by the descriptors below.
1 to 3	There is an attempt to answer the question, but knowledge and understanding is limited, often inaccurate, or of marginal relevance to the question.
4 to 6	The question is partially answered. Knowledge and understanding is accurate but limited. Either the command term is not effectively addressed or the response is not sufficiently explicit in answering the question.
7 to 8	The question is answered in a focused and effective manner and meets the demands of the command term. The response is supported by appropriate and accurate knowledge and understanding of research.

**Cognitive level of analysis**

2. Describe how **one** social or cultural factor affects **one** cognitive process.

**[8]**

*Refer to the paper 1 section A markbands on the next page when awarding marks.*

The command term “describe” requires candidates to give a detailed account of how one social or cultural factor affects one cognitive process.

As the concepts of social and cultural factors are arguably very much related, a distinction is not necessary in the response.

Cognitive processes may include but are not limited to:

- memory
- perception
- attention
- language
- decision-making.

Appropriate factors include, but are not limited to:

- the impact of cultural schemas on memory (Bartlett, 1932)
- the effect of poverty on cognitive ability (Bhoomika, 2008)
- the effects of social identity on the formation of flashbulb memories (Luminet and Curci, 2008)
- the role of schooling in memory strategies (Cole and Scribner, 1974)
- the impact of environmental stimuli on perception (carpentered world hypothesis)
- the role of Confucian dynamism on decision-making (Chen, 2005)
- the role of the collectivistic-individualistic dimension on attribution (Markus and Kitayama, 1991).

If a candidate describes more than one social or cultural factor, credit should be given only to the first factor.

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

If a candidate describes a social or cultural factor making no explicit link to a cognitive process, up to a maximum of **[4]** should be awarded.

**Section A markbands**

<b>Marks</b>	<b>Level descriptor</b>
<b>0</b>	The answer does not reach a standard described by the descriptors below.
<b>1 to 3</b>	There is an attempt to answer the question, but knowledge and understanding is limited, often inaccurate, or of marginal relevance to the question.
<b>4 to 6</b>	The question is partially answered. Knowledge and understanding is accurate but limited. Either the command term is not effectively addressed or the response is not sufficiently explicit in answering the question.
<b>7 to 8</b>	The question is answered in a focused and effective manner and meets the demands of the command term. The response is supported by appropriate and accurate knowledge and understanding of research.

**Sociocultural level of analysis**

3. Outline social identity theory with reference to **one** relevant study.

**[8]**

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

The command term “outline” requires candidates to give a brief account of social identity theory, referring to one relevant study.

Responses should present the key concepts of the social identity theory such as social categorization (ingroup/outgroup), social comparison, and positive ingroup distinctiveness, with reference to one relevant study.

Relevant studies may include, but are not limited to:

- Tajfel’s studies on social groups and identities
- Sherif *et al.*’s Robber’s Cave study (1961)
- Cialdini *et al.*’s Basking in Reflected Glory study (1976)
- Abrams’s study of the role of social identity theory on levels of conformity (1990)
- Maass’s study on the role of social identity theory on violence (2003).

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

If a candidate outlines the theory without making reference to a study, up to a maximum of **[4]** should be awarded.

If a candidate only describes an appropriate study, without making reference to social identity theory, up to a maximum of **[3]** should be awarded.

**Section A markbands**

<b>Marks</b>	<b>Level descriptor</b>
<b>0</b>	The answer does not reach a standard described by the descriptors below.
<b>1 to 3</b>	There is an attempt to answer the question, but knowledge and understanding is limited, often inaccurate, or of marginal relevance to the question.
<b>4 to 6</b>	The question is partially answered. Knowledge and understanding is accurate but limited. Either the command term is not effectively addressed or the response is not sufficiently explicit in answering the question.
<b>7 to 8</b>	The question is answered in a focused and effective manner and meets the demands of the command term. The response is supported by appropriate and accurate knowledge and understanding of research.

**Section B assessment criteria****A — Knowledge and comprehension**

<b>Marks</b>	<b>Level descriptor</b>
<b>0</b>	The answer does not reach a standard described by the descriptors below.
<b>1 to 3</b>	The answer demonstrates limited knowledge and understanding that is of marginal relevance to the question. Little or no psychological research is used in the response.
<b>4 to 6</b>	The answer demonstrates limited knowledge and understanding relevant to the question or uses relevant psychological research to limited effect in the response.
<b>7 to 9</b>	The answer demonstrates detailed, accurate knowledge and understanding relevant to the question, and uses relevant psychological research effectively in support of the response.

**B — Evidence of critical thinking: application, analysis, synthesis, evaluation**

<b>Marks</b>	<b>Level descriptor</b>
<b>0</b>	The answer does not reach a standard described by the descriptors below.
<b>1 to 3</b>	The answer goes beyond description but evidence of critical thinking is not linked to the requirements of the question.
<b>4 to 6</b>	The answer offers appropriate but limited evidence of critical thinking or offers evidence of critical thinking that is only implicitly linked to the requirements of the question.
<b>7 to 9</b>	The answer integrates relevant and explicit evidence of critical thinking in response to the question.

**C — Organization**

<b>Marks</b>	<b>Level descriptor</b>
<b>0</b>	The answer does not reach a standard described by the descriptors below.
<b>1 to 2</b>	The answer is organized or focused on the question. However, this is not sustained throughout the response.
<b>3 to 4</b>	The answer is well organized, well developed and focused on the question.

## Section B

4. Discuss why **two** particular research methods are used at the biological level of analysis. [22]

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

The command term “discuss” requires candidates to offer a considered and balanced review of why two research methods are used at the biological level of analysis.

Research methods used at the biological level of analysis could include experiments, case studies, observations, correlational studies as well as studies which use technology to investigate biological factors, for example, brain imaging.

Although examples of animal research may be discussed, the use of animals in and of itself is not a research method. Responses should focus on the method used in the study of the animals’ behaviour.

Similarly, if candidates discuss twin studies, the focus should be on the correlational nature of the studies.

Discussion about why the methods are used may refer to but are not limited to:

- the appropriateness of the methods
- issues of validity and reliability
- sample choice and size
- ease and cost of the procedure
- the generalizability of findings.

Candidates may address the strengths (and limitations) of the methods as well as why they reflect the principles of the biological level of analysis, *ie*, candidates could make clear how the selected research methods underpin one or more principles of the level of analysis.

If a candidate discusses more than two research methods, credit should be given only to the first two methods.

If a candidate addresses two research methods but does not explicitly link these to the biological level of analysis, the response should be awarded up to a maximum of **[3]** for criterion A, knowledge and comprehension, up to a maximum of **[3]** for criterion B, critical thinking, and up to a maximum of **[2]** for criterion C, organization.

If a candidate addresses only one research method linked to the level of analysis, the response should be awarded up to a maximum of **[5]** for criterion A, knowledge and comprehension, up to a maximum of **[4]** for criterion B, critical thinking, and up to a maximum of **[2]** for criterion C, organization.



5. Discuss the use of technology in investigating **one** cognitive process. [22]

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

The command term “discuss” requires candidates to offer a considered and balanced review of the ways in which technology is used in investigating one cognitive process.

Cognitive processes may include, but are not limited to:

- memory
- perception
- attention
- language
- decision-making.

Candidates may discuss biological factors as long as the response is clearly focused on the cognitive process.

Examples include, but are not limited to:

- the use of EEG to determine the relationship between brain activity and particular cognitive processes (eg the sleep-wake relationship)
- the use of MRI and PET scans to monitor changes in brain function during cognitive functioning, eg Maguire’s studies
- the use of MRI scans to observe specific deficits in the brain and how this impacts cognitive processing, eg HM (Corkin, 1997)
- the use of computer-assisted presentation of stimulus material to aid standardization of procedures in cognitive research, eg the presentation of the words used to demonstrate the Stroop Effect.

Discussion may include, but is not limited to:

- how brain imaging technologies have changed the study of cognitive psychology
- differences in why and how different technologies are used
- evaluation of the techniques (for example, cost/benefit analysis, reductionism)
- ethical and methodological considerations in the use of the technology.

It is important that candidates discuss the use of the technology, and not simply evaluate studies. Although an actual understanding of how the technology works may be beneficial, it is not required for top marks to be awarded.

If a candidate discusses the use of technology in investigating more than one cognitive process, credit should be given only to the discussion of the first cognitive process.

6. Discuss **two or more** ethical considerations related to **one or more** research studies at the sociocultural level of analysis.

[22]

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

The command term “discuss” requires candidates to offer a considered and balanced review of ethical considerations related to specific research studies at the sociocultural level of analysis.

Ethical considerations may be positive (what guidelines were followed) or negative (what guidelines were not followed).

Ethical considerations which may be discussed include, but are not limited to:

- deception
- protection from physical or mental harm
- debriefing
- right to withdraw from a study
- informed consent
- anonymity/confidentiality.

Discussion of ethical considerations may include, but is not limited to:

- why deception is used
- the difficulties of ensuring confidentiality in social 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.

Candidates may discuss two ethical considerations in order to demonstrate depth of knowledge, or may discuss a larger number of ethical considerations in order to demonstrate breadth of knowledge. Both approaches are equally acceptable.

Candidates may refer to one study in order to demonstrate depth of knowledge, or may refer to a larger number of studies in order to demonstrate breadth of knowledge. Both approaches are equally acceptable.

If a candidate discusses only one ethical consideration, the response should be awarded up to a maximum of **[5]** for criterion A, knowledge and comprehension, up to a maximum of **[4]** for criterion B, critical thinking, and up to a maximum of **[2]** for criterion C, organization.

If a candidate discusses ethical considerations but does not relate them to research studies from the sociocultural level of analysis, the response should be awarded up to a maximum of **[3]** for criterion A, knowledge and comprehension, up to a maximum of **[3]** for criterion B, critical thinking, and up to a maximum of **[2]** for criterion C, organization.

---