

# 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 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. Explain why **one** particular research method is used at the cognitive level of analysis. **[8]**

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

The command term “explain” requires candidates to give a detailed account of reasons why one particular research method is used at the cognitive level of analysis.

Research methods referenced may include but are not limited to: experiments, observations, interviews and case studies.

Explanation about “why” the method is used might refer to the appropriateness of the method, issues of validity and reliability, sample choice and size, ease and cost of the procedure, and the generalizability of findings. Candidates may address the strengths of the method as a means of explaining why it would be used, as well as how it reflects the principles of the cognitive level of analysis, *ie* candidates could make clear how the selected research method underpins one or more principles of the cognitive level of analysis.

Candidates are not required to describe the method in detail nor provide a study to support their response; however, the use of the research must be explicitly linked to the cognitive level of analysis.

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

If a candidate explains a method but does not explicitly link it to the cognitive level of analysis, 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.

**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 of 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 the use of brain imaging technology in investigating the relationship between biological factors and behaviour.

[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 use of brain imaging technology in investigating the relationship between biological factors and behaviour. The focus of the response must be on how brain imaging technology is used to understand how biological factors (such as hormones, neurotransmitters, brain structure) interact with a specific behaviour (such as language production, memory, emotion).

Brain imaging technologies could include, but are not limited to:

- CAT/CT (computerized tomography)
- PET (positron emission tomography)
- MRI (magnetic resonance imaging)
- fMRI (functional magnetic resonance imaging)
- EEG (electroencephalography)
- TCI (transcranial imaging).

Discussion may include, but is not limited to:

- how brain imaging technologies have improved our understanding of the relationship between biological factors and behaviour
- 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 understanding of how the technology works may be beneficial, it is not required for top marks to be awarded.

Candidates may discuss one brain imaging technology in order to demonstrate depth of knowledge, or may discuss more than one brain imaging technology in order to demonstrate breadth of knowledge. Both approaches are equally acceptable.

5. Discuss **two** ethical considerations related to research studies at the cognitive 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 research studies at the cognitive level of analysis.

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

Ethical considerations may include, but are not limited to:

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

Case studies that examine both biological and cognitive factors may be used to address the demands of the question, but the focus must be on the cognitive factors in the study.

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

- why deception is used
- a cost-benefit analysis approach with regard to ethical considerations
- the meaning of “informed” consent and who has the right to give it
- changes over time in adherence to ethical standards/guidelines
- why anonymity/confidentiality of data is important.

The focus of the response should be on ethical considerations and not on the description of studies.

If a candidate discusses more than two ethical considerations, credit should be given only to the first two discussions.

Candidates may discuss a small number of studies in order to demonstrate depth of knowledge, or may discuss 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 cognitive 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.



6. Examine the use of **two** compliance techniques. [22]

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

The command term “examine” requires candidates to consider two compliance techniques in a way that uncovers the assumptions underlying these techniques.

Compliance techniques that may be examined include, but are not limited to:

- reciprocity
- foot-in-the-door
- door-in-the-face
- low-balling.

Assumptions may include, but are not limited to:

- levels of compliance may be affected by factors such as liking, authority, *etc*
- the role of cognitive dissonance
- an individual’s need for social acceptance
- the role of goal gradients
- efficacy of the techniques
- self-perception theory.

If a candidate examines more than two compliance techniques, credit should be given only to the first two compliance techniques. However, candidates may address other techniques and should be awarded marks for these as long as they are clearly used to clarify the examination of one or both of the two main techniques addressed in the response.

If a candidate examines only one compliance technique, 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.

---