



MARKSCHEME

November 2013

PSYCHOLOGY

Higher Level and Standard Level

Paper 1

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SECTION A

Biological level of analysis

1. Describe ethical considerations related to *one* study at the biological level of analysis. **[8 marks]**

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 ethical considerations related to one study at the biological level of analysis.

Candidates should refer to an appropriate study carried out at the biological level of analysis. When addressing ethical considerations, it is not necessary to refer to a study that violates these standards; the study could have met ethical standards.

Ethical considerations include, but are not limited to:

- obtaining informed consent
- avoiding harm or suffering of participants
- no changes to the participants that are not reversible in nature
- anonymity maintained
- the need for debriefing.

Examples must be focused on *biological* aspects of the research – for example, Corkin’s use of brain imaging would be acceptable, whereas Milner’s cognitive testing of HM would not.

Candidates must make an explicit link between ethical considerations and the study to access the top markband.

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

If a candidate only addresses one ethical consideration, then marks in the top markband should not be awarded.

If a candidate describes a study but ethical considerations are not addressed, apply the markbands up to a maximum of **[3 marks]**.

If a candidate addresses ethical considerations but does not refer to an appropriate study, apply the markbands up to a maximum of **[3 marks]**.

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

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 the reliability of *one* cognitive process with reference to *one* relevant study.** **[8 marks]**

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

The command term “explain” requires candidates to give a detailed account, including reasons for why one cognitive process is or is not reliable. Cognitive processes may include: memory, perception, attention, language, thinking or decision-making.

Responses may include, but are not limited to:

- that human memory is reconstructive and remembering is not simply retrieving a fully encoded event (Loftus and Palmer, 1974; Bartlett, 1932)
- that human memory may be reliable, for example, eyewitness testimony because of reliable biological processes (Brown and Kulik, 1977; Yuille and Cutshall, 1986)
- the role of heuristics in decision-making leads to errors in judgement (Tversky and Kahneman, 1974).

Whichever cognitive process is selected, the focus of the response should be on its reliability.

If the reliability of more than one cognitive process is explained, credit should be given only to the first cognitive process.

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

If a candidate only describes an appropriate study without making reference to the reliability of one cognitive process, apply the markbands up to a maximum of **[3 marks]**.

If a candidate explains the reliability of one cognitive process without making reference to a study, apply the markbands up to a maximum of **[4 marks]**.

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.

Sociocultural level of analysis

3. Explain *one* compliance technique.

[8 marks]

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

The command term “explain” requires candidates to give a detailed account, including reasons or causes, of one compliance technique.

Acceptable compliance techniques include, but are not limited to:

- reciprocity
- foot-in-the-door
- door-in-the-face
- low balling
- bait and switch.

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

Although an example should be given to illustrate the technique, it is not required that the example be an empirical study.

Candidates may address principles and/or factors such as evolutionary arguments, social comparison, cognitive dissonance, cultural norms, goal gradients (commitment) and/or preservation of self-image as part of an explanation of the compliance technique. However, if a candidate explains factors without reference to a specific compliance technique, a maximum of [3 marks] should be awarded.

If a candidate only describes an appropriate study without identifying or explaining a compliance technique, apply the markbands up to a maximum of [3 marks].

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.

Section B assessment criteria

A — Knowledge and comprehension

Marks	Level descriptor
0	The answer does not reach a standard described by the descriptors below.
1 to 3	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.
4 to 6	The answer demonstrates limited knowledge and understanding relevant to the question or uses relevant psychological research to limited effect in the response.
7 to 9	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

Marks	Level descriptor
0	The answer does not reach a standard described by the descriptors below.
1 to 3	The answer goes beyond description but evidence of critical thinking is not linked to the requirements of the question.
4 to 6	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.
7 to 9	The answer integrates relevant and explicit evidence of critical thinking in response to the question.

C — Organization

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

SECTION B

- 4. Evaluate the use of two brain imaging technologies in investigating the relationship between biological factors and behaviour. [22 marks]**

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

The command term “evaluate” requires candidates to address the strengths and limitations of brain imaging technologies. Candidates need to clearly identify two brain imaging technologies, give examples of how they have been used in research, and then evaluate their use. Although a discussion of both strengths and limitations is required, it does not have to be evenly balanced to gain high marks.

Examples of brain imaging technologies could include, but are not limited to:

- EEG (for example, Davidson *et al.*, 2004, on meditation)
- TCI (transcranial imaging) in studies of PTSD
- PET (for example, Raine *et al.*, 1997, on violent behaviour; use of PET in the study of Alzheimer’s disease)
- MRI (for example, Corkin, 1997, study of HM)
- fMRI (for example, Harris and Fiske, 2006, on prejudice; Wang *et al.*, 2007, on stress).

It is important that candidates evaluate the use of the technologies, and not simply evaluate studies.

If a candidate evaluates more than two brain imaging technologies, credit should be given only to the first two evaluations.

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

If a candidate discusses only strengths or only limitations, the response should be awarded up to a maximum of **[5 marks]** for criterion B, critical thinking, and up to a maximum of **[2 marks]** for criterion C, organization. Up to full marks may be awarded for criterion A, knowledge and comprehension.

5. Discuss how social and/or cultural factors affect *one* cognitive process. [22 marks]

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 that includes a range of arguments, factors or hypotheses, supported by appropriate evidence, of how social and/or cultural factors affect one cognitive process.

Candidates should give a considered review of the way in which social and/or cultural factors have a bearing on one way in which people process information, for example, memory, thinking, perception, attention, decision-making or language. As the concepts of *social* and *cultural* factors are arguably very much related, such distinction is not necessary.

Candidates may discuss theories and/or methodological issues as well as giving the findings of studies.

Examples of appropriate factors include, but are not limited to:

- Cultural norms and past experience (Bartlett, 1932)
- Social identity’s effect on formation of flashbulb memories (Luminet and Curci, 2009)
- Schooling’s effects on encoding strategies (Cole and Scribner, 1974)
- The effect of poverty on cognitive processing (Mani, 2013; Pollitt, 1995)
- The role of environmental factors (Deregowski, 1972; Segall et al.’s carpentered world hypothesis, 1966).

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

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

6. Discuss how *and* why *one* particular research method is used to investigate behaviour at the sociocultural level of analysis. [22 marks]

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, supported by appropriate evidence, of how and why one particular research method is used at the sociocultural level of analysis. Although a discussion of both *how* and *why* is required, it does not have to be evenly balanced to gain high marks.

Research methods include experiments, case studies, observations and interviews. Candidates may address the different ways in which a research method is done – for example, a covert or naturalistic observation – but the focus should be on the nature of the research method itself.

Examples of research studies could include, but are not limited to:

- Festinger’s (1956) covert observation studying cult behaviour
- Bandura’s (1961, 1963, 1965) laboratory experiments investigating social learning theory
- Hofstede’s (1973) study which used interviews to study cultural differences in the workplace
- Sherif’s (1954) “Robbers Cave” field experiment investigating the realistic conflict theory.

Discussion about *how* the method is used might refer to key features of the method as well as how the method was used in specific research. For example, experimental studies may identify the sampling and allocation procedures, the independent and dependent variables, and the way in which extraneous variables were controlled.

Discussion about *why* the method is used might refer to the appropriateness of the method for the aim, 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 well as how it reflects the principles of the sociocultural level of analysis, that is, 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 one research method, credit should be given only to the first discussion.

If a candidate discusses only the “how” or only the “why”, the response should be awarded up to a maximum of [6 marks] for criterion A, knowledge and comprehension, up to a maximum of [6 marks] for criterion B, critical thinking, and up to a maximum of [2 marks] for criterion C, organization
