

Markscheme

May 2024

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. Outline neuroplasticity with reference to **one** relevant study.

[9]

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

The command term “outline” requires candidates to give a brief account or summary of neuroplasticity with reference to one study.

Responses should indicate how the neural connections in the brain change in response to internal or external stimuli. An outline of neuroplasticity may show conceptual understanding of long-term potentiation, dendritic branching, and/or synaptic pruning. Either animal or human research is appropriate.

Relevant studies may include, but are not limited to:

- Bremner *et al.* (2008) on plasticity of the hippocampus in post-traumatic stress disorder
- Draganski *et al.* (2004) on neuroplasticity (in mid-temporal area) and learning in jugglers
- Luby *et al.* (2012) on maternal support and hippocampal development
- Maguire *et al.* (2000) showing structural change in the hippocampi of taxi drivers
- Rosenzweig, Bennett and Diamond (1972) on the role of environmental factors on neuroplasticity in the cerebral cortex
- Merzenich *et al.* (1984) on cortical remapping in owl monkeys.

When describing the study, the relevant area of the brain where neuroplasticity is observed should be identified.

As the question is focused only on the physiological process of neuroplasticity, it is not necessary to focus on a behaviour; studies of cortical mapping are appropriate.

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

If a candidate only describes an appropriate study without outlining neuroplasticity, up to a maximum of **[4]** should be awarded.

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

Cognitive approach to understanding behaviour

2. Outline **one** memory model with reference to **one** relevant study.

[9]

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

The command term “outline” requires candidates to give a brief account or summary of one memory model.

Relevant memory models may include, but are not limited to:

- Flashbulb memory
- Levels of processing
- Multi-store model
- Schema theory
- Working memory model.

Relevant studies may include, but are not limited to:

- Baddeley and Hitch (1974) on the evidence of working memory
- Bartlett (1932) on the role of schema on memory storage
- Brown and Kulik (1977) on flashbulb memory
- Craik and Lockhart (1975) on the levels of processing model
- Peterson and Peterson (1959) on the role of rehearsal and memory consolidation
- Murdock (1962) or Glanzer & Cunitz (1966) on the serial position effect
- Studies of brain damage to support the theory: Milner’s (1966) study of HM; Warrington and Shallice’s (1974) study of KF.

Although it is acceptable for candidates to include a diagram of the model, the written outline of the model is assessed on its own merits.

If a candidate outlines more than one model of memory or more than one study, credit should be given only to the first model of memory or study.

If a candidate outlines the model of memory without making reference to a relevant study, up to a maximum of **[5]** should be awarded.

If a candidate only describes an appropriate study without outlining a model of memory, up to a maximum of **[4]** should be awarded.

Sociocultural approach to understanding behaviour

3. Describe acculturation 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 acculturation with reference to one relevant study.

Candidates could describe concepts of acculturation and/or describe acculturation strategies (Berry’s acculturation model).

Relevant studies may include, but are not limited to:

- Lueck and Wilson (2010) on predicting acculturative stress in Asian immigrants and Asian Americans
- Wang et al. (2010) on positive psychological functioning in Cuban American university students
- Shah et al. (2015) on obesity in South Asian workers in the United Arab Emirates
- Miranda and Matheny (2000) on socio-psychological predictors of acculturative stress among Latino adults
- Berry et al. (1987) on acculturative stress across cultures
- Torres et al. (2012) on assimilation and integration in Latino-Americans.

If a candidate describes acculturation but does not describe a relevant study, award up to a maximum of **[5]**.

If a candidate describes a relevant study but does not describe acculturation, up to a maximum of **[4]** should be awarded.

If a candidate describes acculturation with reference to more than one study, credit should be given only to the first study.

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. Evaluate **one or more** research methods used in the biological approach to understanding human behaviour. **[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 research methods used in the biological approach to understanding human behaviour. Although a discussion of both strengths and limitations is required, it does not have to be evenly balanced to gain high marks.

Behaviour may include cognitive processes.

Research methods used in the biological approach to understanding human behaviour include, but are not limited to:

- True experiments (Antonova et al., 2011; Draganski et al., 2003; McGaugh and Cahill, 1995; Newcomer, 1999; Passamonti et al., 2012; Pedersen et al., 2006)
- Quasi experiments (Maguire, 2000; Sharot, 2007; Raine et al., 1997)
- Case studies (Milner’s study of HM, 1966; Tierney et al.’s study of MA, 2001)
- Correlational studies (Bouchard et al., 1990; Dabbs, 1977)

Research methods include experiments, observations, interviews, surveys/questionnaires, case studies, meta-analysis, and correlational studies. Brain imaging techniques, longitudinal studies, animal research, twin and adoption studies are not research methods.

Although candidates may include evaluation of the studies, the focus of the critical thinking should be on the research methods.

Evaluation of the research methods may include, but is not limited to:

- the ability to determine causality
- control of extraneous variables
- objectivity vs subjectivity
- types of data collected and how it is analysed or interpreted
- issues of validity and reliability
- potential generalizability of findings
- holistic vs reductionist approaches to the study of behaviour.

If the candidate addresses only strengths or only limitations, the response should be awarded up to a maximum of **[3]** for criterion D: critical thinking.

5. To what extent has the reliability of **one or more** cognitive processes been evidenced in research?

[22]

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

The command term “to what extent” requires candidates to consider the merits (or otherwise) of one or more cognitive processes in terms of their reliability.

This question is asking about the reliability of cognitive processes as demonstrated in research. Reliability in this context refers to the consistency or dependability of a processes.

Relevant studies related to reliability of memory include, but are not limited to:

- Loftus and Palmer’s (1974) study on car crash and eyewitness testimony
- Yuille and Cutshall’s (1986) study on crime scene and eyewitness testimony
- Neisser and Harsch’s (1992) study on the Challenger disaster and false recollections.

Relevant studies related to cognitive biases include but are not limited to:

- Tversky and Kahneman (1974); Strack and Mussweiler (1997); Englich and Mussweiler (2001) on anchoring bias
- Tversky and Kahneman (1981) on framing effects
- Tversky and Kahneman (1973) on availability heuristic
- Hamilton and Gifford (1976), Snyder and Schwann (1978) on illusory correlation
- Wason (1968), Cox and Griggs (1982) on matching bias.

When responding to the command term “to what extent”, considerations may include, but are not limited to:

- Methodological considerations
- Different types of memory have different levels of reliability
- Possible theoretical assumptions and/or biases
- Issues of validity and reliability
- Generalizability of findings
- Contradictory explanations or findings.

Candidates may discuss one cognitive process in order to demonstrate depth of knowledge or may discuss a larger number of cognitive processes in order to demonstrate breadth of knowledge. Both approaches are equally acceptable.

6. Discuss **one or more** effects of the interaction of local and global influences on 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 or more effects of the interaction of local and global influences on behaviour.

Behaviour in this instance may include attitudes, identities or any other accepted behaviour.

Candidates may discuss the effect of the interaction of local and global influences on specific aspects of human behaviour or address behaviour in general. Both approaches are equally acceptable. Candidates may discuss one effect in order to demonstrate depth of knowledge, or may discuss a larger number of effects in order to demonstrate breadth of knowledge. Both approaches are equally acceptable.

Relevant studies on the effects of the interaction of local and global influences on behaviour may include, but are not limited to:

- Effects on mental health: Ogihara and Uchida (2014); Becker et al. (2002); Norasakkunkit and Uchida (2014); Berry (1987); Delafosse (1993)
- Tolerance and international understanding: Chiu et al (2009); Novotny and Polonsky (2011); Morris et al (2011); Wolff and Borzikowsky (2018)
- Attitudes toward marriage: Verma and Saraswathi (2002).

Discussion may include but is not limited to:

- methodological considerations: e.g., lack of causality; bidirectional ambiguity; researcher and participant biases
 - the interaction of local and global influences on behaviour
 - inability to establish causality
 - operationalization of variables: local and global culture, level of globalization, acculturative stress
 - generalizability of findings
 - the dynamic nature of culture
 - researcher and participant biases.
-