

Markscheme

November 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. Describe localization of function 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 localization of function with reference to one relevant study.

Responses should describe localization of function, clearly indicating how a specific area of the brain is, or specific areas are, involved in behaviour or cognition.

Examples could include but are not limited to:

- the role of the hippocampus in episodic, semantic or spatial memory (Corkin, 1997; Maguire, 2000)
- the role of the amygdala in aggression (Matthies *et al.*, 2012)
- the role of the amygdala in memory (McGaugh and Cahill, 1995; Sharot *et al.*, 2007)
- the role of the amygdala in emotion (Feinstein *et al.*, 2011)
- the role of the prefrontal lobe in decision making (Bechara, 1999).

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

If a candidate describes localization of function but does not refer to an appropriate study, up to a maximum of **[5]** should be awarded.

If a candidate describes a relevant study, but localization of function is not described, up to a maximum of **[4]** should be awarded.

Cognitive approach to understanding behaviour

2. Explain **one** bias in thinking and decision making with reference to **one** relevant study. **[9]**

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

The command term “explain” requires candidates to give a detailed account, including reasons or causes, of one bias in thinking and decision-making related to one relevant study.

Thinking and decision-making are closely related cognitive processes and candidates do not need to make a distinction between the two.

Examples of biases in thinking and/or decision-making with related studies may include, but are not limited to:

- anchoring bias: Englich and Mussweiler (2001), Tversky and Kahneman (1974)
- availability heuristic: Tversky and Kahneman (1973)
- confirmation bias: Chapman (1969), Stone (1997), Darley and Gross (1983), Wason (1960)
- framing effect: Tversky and Kahneman (1986)
- halo effect: Dion et al. (1972)
- illusory correlation: Hamilton and Gifford (1976), Snyder and Schwann (1978)
- matching bias: Wason (1968); Cox and Griggs (1982)
- representativeness heuristic: Tversky and Kahneman (1973).

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

If a candidate explains one bias in thinking and decision making without making reference to a relevant study, up to a maximum of **[5]** should be awarded.

If a candidate only describes a relevant study without explaining a bias, up to a maximum of **[4]** should be awarded.

Sociocultural approach to understanding behaviour

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

[9]

Refer to the paper 1 section A markbands when awarding marks

The command term “explain” requires candidates to give a detailed account, including reasons or causes, of social identity theory with reference to one relevant study.

The main concepts of social identity theory include, but are not limited to:

- social categorization (in-group/out-group)
- social identification
- social comparison
- positive distinctiveness.

Studies related to social identity theory may include, but are not limited to:

- Abrams’s (1990) study on the role of social identity on levels of conformity
- Cialdini *et al.*’s (1976) "Basking in Reflected Glory" study
- Drury *et al.*’s (2009) study of helping behaviour
- Levine’s (2005) study of helping behaviour
- Tajfel’s studies on social groups and identities
- Sherif *et al.*’s (1961) "Robbers Cave" study
- Park and Rothbart’s (1982) study of out-group homogeneity.

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

If a candidate explains social identity theory 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 explaining social identity 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 organization

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 the relationship between genetics 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 review of the relationship between genetics and behaviour.

Candidates may address one behaviour to demonstrate depth of knowledge or may address more than one behaviour to demonstrate breadth of knowledge. Both approaches are equally acceptable.

Relevant behaviours that may be used to discuss the relationship may include, but are not limited to:

- intelligence
- sexual orientation
- mental health, e.g. depression, PTSD, addiction
- aggression
- mate selection / mating behaviour

Relevant studies may include, but are not limited to:

- Bouchard *et al.*'s (1990) report on IQ in the “Minnesota Twin Studies”
- Plomin and Petrill's (1997) research into the heritability of IQ in twin and adoption studies
- Bailey and Pillard (1990) research into genetics and sexuality
- Kendler *et al.*'s (2006) twin study on genetics and depression
- Caspi *et al.*'s (2003) study on the 5-HTT gene and depression
- Gilbertson *et al.*'s (2002) study on genes, hippocampal size and PTSD
- Kendler and Prescott's (1998) twin study on genes and drug addiction
- Caspi *et al.*'s (2002) study on the role of MAOA-L (‘warrior gene’) in aggression
- Wedekind (1995) on the relationship between genes, the immune system and mate selection.

Discussion may include, but is not limited to:

- methodological and ethical considerations related to research
- implications of the findings
- assumptions and biases
- areas of uncertainty e.g., the role of the environment in gene expression, and the diathesis-stress model
- supporting and/or contradictory evidence.

5. Evaluate **one or more** research methods used to study the interaction between technology and cognitive processes. [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 to study the interaction between technology and cognitive processes.

Although the discussion of both strengths and limitations is required, it does not have to be evenly balanced to gain high marks.

Relevant research methods may include, but are not limited to:

- experimental methods
- correlational studies
- case studies
- meta-analyses
- surveys

Relevant studies may include, but are not limited to:

- Mueller and Oppenheimer's (2014) experiment on the use of laptops versus paper in note-taking by college students
- Sparrow *et al.*'s (2011) experiments on transactive memory and digital amnesia.
- Rosen *et al.*'s (2013) true experiment on the influence of induced multi-tasking on cognitive processes
- Rosser *et al.*'s (2007) correlational study on video games and visual attention.
- Hirst *et al.*'s (2009) correlational study on media coverage and accuracy of memory
- Uttal *et al.*'s (2013) meta-analysis on technology and spatial reasoning skills
- Chou and Edges's (2012) use of a survey in the study of the availability heuristic in thinking.

Evaluation of the research method(s) may include, but is not limited to:

- issues of validity (internal, ecological, population, construct) and credibility
- reliability
- sampling technique
- generalizability/transferability of findings
- demand characteristics
- extraneous and confounding variables
- the appropriateness of the methods for the aim.

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. All remaining criteria should be awarded marks according to the best fit approach.

Candidates may evaluate one research method to demonstrate depth of knowledge, or may evaluate more than one research method to demonstrate breadth of knowledge. Both approaches are equally acceptable.

6. Discuss **one or more** studies investigating enculturation.

[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 studies investigating enculturation.

Enculturation is the process by which people learn the necessary and appropriate skills and norms in the context of their culture.

Relevant studies may include, but are not limited to:

- Fagot et al.’s (1974) and Sroufe et al.’s (1993) studies on enculturation of gender roles
- Odden and Rochat’s (2004) study on enculturation of fishing, household chores and the hierarchical system in Samoa
- Greenfield’s (2006) study on enculturation of weaving techniques
- Demorest et al.’s (2008) study investigating the influence of enculturation on musical memory
- Kearins’s (1981) study on enculturation of different memory strategies
- Keller et al.’s (2008) study on verbal interaction of German and Cameroonian mothers with their infants.

Critical discussion of the study/studies may include, but is not limited to:

- implications of the findings
 - assumptions and biases
 - areas of uncertainty
 - demand characteristics
 - extraneous and confounding variables
 - ethical considerations
 - issues of validity (internal, ecological, population, construct) or credibility
 - sampling technique
 - generalizability/transferability of findings.
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