Diploma Programme
Programme du diplôme
Programa del Diploma

Markscheme

May 2021

Psychology

Standard level

Paper 1

12 pages

Section A markbands

Marks	Level descriptor
0	• The answer does not reach a standard described by the descriptors below.
1–3	• 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	• 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	• 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 **one** link between genes and behaviour 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 a link between genes and behaviour with reference to a relevant study.

Examples of links between genes and behaviour include, but are not limited to:
- genes and intelligence (*eg*, Bouchard et al., 1990)
- genes and aggression (*eg*, Caspi et al., 2002)
- genes and depression (*eg*, Caspi et al., 2003, Kendler et al, 2006).

If a candidate does not refer to a relevant study, award up to a maximum of **[5]**.

If a candidate makes reference to a relevant study without making the connection to the link outlined, award up to a maximum of **[4]**.

If a candidate outlines more than one example of a link between genes and behaviour, credit should be given only to the first link outlined.

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

Cognitive approach to understanding behaviour

2. Describe **one** study investigating how **one** bias in thinking and decision-making influences human behaviour. **[9]**

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

The command term "describe" requires candidates to give a detailed account of one study investigating biases in thinking and decision-making on human behaviour.

Candidate responses should include information related to the aim, procedure, findings, and conclusion(s) of the study. Information relevant to a description includes, but is not limited to:

- the aim of the study is linked to a cognitive bias.
- a description of the research method used
- description of the design and identification of the IV and DV of an experiment.
- use of terminology to classify an observation (e.g. covert, participant, naturalistic) or an interview (structured, semi-structured, focus group)
- description of the use of triangulation in a case study
- identification of the sample that was used; however, precise sample sizes are not required
- controls used by the researcher
- materials used in the study
- the conclusions drawn from the findings with regard to a bias. Candidates do not need to state the statistical results

Relevant studies may include, but are not limited to:

- Anchoring bias: Englisch and Mussweiler (2001), Tversky and Kahnemann (1974)
- Availability heuristic: Tversky and Kahneman (1973) – participants recalled more famous names than non-famous names as they were more readily 'available' in their memory.
- Confirmation bias: Wason (1960), Chapman (1969), Stone(1997), Darley and Gross(1983).
- Framing effect: Tversky and Kahnemann (1986)
- Halo effect: Dion et al (1972), Zebrowitz and McDonald (1991)
- Illusory correlation: Hamilton and Gifford (1976), Snyder and Swann (1978)
- Matching bias: Wason (1968), Cox and Griggs (1982) – participants use the language of the rule to choose which cards to turn over.
- Representativeness heuristic: Tversky and Kahnemann (1973).

If a candidate addresses one bias in thinking and decision-making but does not describe a study, award up to a maximum of **[3]**.

If a candidate describes more than one study, credit should be given only for the first description.

Sociocultural approach to understanding behaviour

3. Describe **one** study investigating acculturation. **[9]**

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

The command term "describe" requires candidates to give a detailed account of one study investigating acculturation.

Candidate responses should include information related to the aim, procedure, findings, and conclusion(s) of the study. Information relevant to a description includes, but is not limited to:

- the aim of the study is linked to acculturation
- a description of the research method used.
- a description of the design and identification of the IV and DV of an experiment..
- use of terminology to classify an observation (e.g. covert, participant, naturalistic) or an interview (structured, semi-structured, focus group)
- use of correlational design
- identification of the sample that was used; however, precise sample sizes are not required
- controls used by the researcher
- materials used in the study
- the conclusions drawn from the findings with regard to acculturation. Candidates do not need to state the statistical results.

Relevant studies may include, but are not limited to:

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

If a candidate addresses acculturation but does not describe a relevant study, award up to a maximum of **[4]**.

If a candidate describes 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. Discuss how **one or more** hormones affect human 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 how one or more hormones affect human behaviour.

Responses should make a clear link between the function of the hormone(s) and human behaviour.

Relevant hormones may include, but are not limited to: adrenaline, cortisol, melatonin, testosterone, estrogen, oxytocin.

Any aspect of human behaviour (*eg* aggression, depression, stress, attachment) is acceptable as long as the response focuses on how the hormone influences the particular behaviour.

Examples of how hormones influence human behaviour could include, but are not limited to the influence of:
- cortisol on recall
- oxytocin on trust and social bonding
- adrenaline on memory
- testosterone on aggression

If a candidate addresses the effects of a neurotransmitter on behaviour, credit should only be awarded where a neurotransmitter is accurately described as acting as a hormone, for example in an explanation of how noradrenaline acts as a hormone in the stress response.

Possible studies include, but are not limited to:
- Radke et al.'s (2015) study investigating the effects of testosterone on women's responses to angry faces
- McGaugh and Cahill's (1995) study on adrenaline and memory
- Newcomer et al.'s (1999) study on cortisol and memory
- Baumgartner et al.'s (2008) study on the role of oxytocin on trust in economic behaviour.

Critical discussion points may include, but are not limited to:
- methodological considerations
- how the findings of research have been interpreted and applied
- implications of the findings
- contradictory evidence or alternative theories/explanations.

Responses referring to research conducted on animals are acceptable as long as they are linked to human behaviour.

5. Evaluate **one or more** studies investigating reconstructive memory. **[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 studies investigating reconstructive memory. Although a discussion of both strengths and limitations is required, it does not have to be evenly balanced to gain high marks.

Relevant studies include, but are not limited to:

- Loftus and Pickrell's (2002) study in creation of false memories
- Loftus and Palmer's (1974) study of eyewitness testimony
- Cann et al.'s (2011) study of false recall in the Deese–Roediger–McDermott (DRM) paradigm
- Bartlett's (1932) "War of Ghosts" study of schema processing.
- Yuille and Cutshall's (1986) study of the effect of leading questions on eye-witnesses to a real crime

Critical evaluation may include, but is not limited to:

- why the method(s) was/were selected and the appropriateness of the method(s) including strengths and limitations of the study/studies
- possible theoretical assumptions and/or biases in relation to the chosen method(s) in the study/studies
- the issues of validity and reliability
- the generalizability of findings
- contradictory findings
- ethical considerations
- implications and practical applications of the findings

6. Discuss **one or more** research methods used to investigate cultural origins of behaviour and/or cultural origins of cognition. **[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 research methods used to investigate the cultural origins of behaviour and/or cognition.

Candidates may discuss research methods investigating specific aspects of human behaviour and/or cognition or discuss research methods investigating behaviour and/or cognition in general. Both approaches are equally acceptable.

Relevant research methods may include, but are not limited to:
- case studies
- correlational studies
- experiments (laboratory, field or natural/quasi)
- interviews
- observations
- meta-analysis.

Relevant studies include, but are not limited to:
- Van Ijzendoorn and Kroonenberg’s (1988); Sagi et al.’s (1985) studies on culture and attachment
- Berry’s (1967) study on culture and conformity
- Lin and Kleinman’s (1988); Parker et al.’s (2001) studies on culture and abnormal behaviour
- Raylu and Oei’s (2004); Brady’s (1995) studies on culture and addictive behaviour
- Cole and Scribner’s (1974); Kearin’s (1981) studies on cultural differences in cognitive skills
- Kulkofsky et al.’s (2011); Rogoff and Waddell’s (1982) studies on culture and memory

Critical discussion points may include, but are not limited to:
- the appropriateness of the method for the aim
- the issues of validity and reliability
- the sample choice and size
- the ease and cost of the procedure
- the generalizability of findings
- the strengths and limitations of the research method.