



General Certificate of Education

Psychology
Specification B

**Unit 4 (PSYB4) Approaches, Debates and
Methods in Psychology**

Specimen mark scheme for examinations in June 2010 onwards
This mark scheme uses the [new numbering system](#)

Further copies of this Mark Scheme are available to download from the AQA Website: www.aqa.org.uk

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Set and published by the Assessment and Qualifications Alliance.

Section A Approaches in Psychology

Option A

01 Outline two methodological criticisms of Freud's use of case studies. (4 marks)
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[AO3 = 4]

Award two marks for each criticism which must be:

- methodological;
- apply to case studies.

One mark for a relevant identification of a criticism. Likely answers are issues of reliability, validity, falsifiability, objectivity, sampling and generalisability.

A further mark for elaboration of the criticism which shows required analysis/explanation. Accept relevant references to specific case studies to illustrate as well as general points.

02 Matt is a young lawyer who repeatedly loses his temper at work. Deep down, he thinks that others are better able to cope with the pressures of the job.

Outline how psychologists from **two** of the following approaches might attempt to explain why Matt loses his temper at work:

- behaviourist
- cognitive
- psychodynamic.

(4 marks)

[AO2 = 4]

Award marks for the application of the approaches to the stimulus material and relevant analytical points. Credit studies as application of knowledge.

Behaviourist

References to past consequences of behaviour (losing temper). There may be reference to conditioning or the work of Skinner, Thorndike etc.

Candidates may offer explanations which focus on the stimulus conditions associated with behaviour.

Candidates may make several analytical points or develop only one.

Cognitive

Candidates may make reference to cognitive processes, internal mental processes or the processing of information. There may be references to perception, memory, thinking, attributional analysis etc.

Candidates may make several analytical points or develop only one.

Psychodynamic

The focus here would be on psychodynamic conflict, unconscious reasons, hidden processes and impulses. Perhaps disliking aspects of the job or resentment at the demands of the job. Unpleasant or anxiety producing experiences would be repressed by the ego and/or displaced/expressed as aggressive behaviour. Credit references to regression.

Candidates may make several analytical points or develop only one.

03 Discuss two limitations of the humanistic approach in psychology. Refer to at least one other approach in your answer. (12 marks)

[AO1= 4 , AO2 = 8]

By being required to assess the humanistic approach in the context of at least one other approach, candidates are required to demonstrate a critical appreciation of the breadth of approaches in psychology. The requirement to discuss two limitations will also encourage candidates to either make links with other approaches and to reflect on methodology in support of their answers.

AO1 Up to four marks for description of two limitations of the humanistic approach or for relevant basic assumptions and descriptive detail of strengths/weaknesses of another approach chosen for comparison. Most likely limitations will probably cover the rejection of science, the difficulty of testing humanistic concepts empirically, the limitations of therapy, the focus on conscious experience and on current experiences, the problem of free will in opposition to the deterministic laws of science, the adoption of an idiographic approach and the relatively limited application to topic areas in psychology.

(Examiners should take a flexible approach to what constitutes one limitation as they are inevitably interrelated.)

AO2 These marks are to be awarded for analysis, evaluation and application of knowledge, eg explanations for the difficulty of testing concepts empirically, the implications of the rejection of the deterministic laws of science. Roughly four marks for each limitation. If candidates select several approaches for comparison credit can be given for breadth as long as the information demonstrates AO2 skills. Do not credit a list of different approaches illustrating the same point. Credit use of studies where relevant.

Maximum of 7 marks if only one limitation addressed
Maximum of 7 marks if no other approach referred to

Mark bands**12-10 marks Excellent answers**

The two limitations are clearly identified, described in sufficient detail and accurately. Comparison is made with at least one other approach appropriately. Analysis shows a very sound understanding of each limitation and reference to another approach provides a very clear argument. A good depth of knowledge and understanding is shown and the answer is organised. A line of argument is clear for each limitation and the discussion is balanced. The candidate expresses most ideas clearly and fluently, with consistently effective use of psychological terminology. Arguments are well structured, with appropriate use of sentences and paragraphs. There are few, if any, minor errors of grammar, punctuation and spelling. The overall quality of language is such that meaning is rarely, if ever, obscured.

9-7 marks**Good to average answers**

A generally accurate response but less analysis than for the top band. Two limitations are identified and there is reference to another approach. Some analysis is attempted and discussion is adequate for both limitations or good for at least one. Unbalanced but otherwise good answers will fall into this band. Most of the answer is focused but there may be some irrelevance and/or minor understanding. An excellent response dealing with just one limitation or with no reference to another approach will fall at the bottom of this band. It is unlikely that an answer containing just one limitation and with no reference to another approach will access the bottom of this band.

The candidate expresses most ideas clearly and makes some appropriate use of psychological terminology. The answer is organised, using sentences and paragraphs. Errors of grammar, punctuation and spelling may be present but are mostly minor, such that they obscure meaning only occasionally.

6-4 marks**Average to poor answers**

A generally descriptive response with some outline of the limitations of the humanistic approach. Reference to another approach may be absent or if present show little analysis. Discussion if attempted will be weak. Answers with just one limitation and with no reference to another approach will probably fall into this band though at the top end there must be some analysis or discussion. Purely descriptive responses can fall at the bottom of this band. The candidate expresses basic ideas clearly but there may be some ambiguity. The candidate uses key psychological terminology inappropriately on some occasions. The answer may lack structure, although there is some evidence of use of sentences and paragraphs. There are occasional intrusive errors of grammar, punctuation and spelling which obscure meaning.

3-1 marks

Poor answers

Some relevant points but no analysis. Answers will be brief; knowledge and understanding limited. Structure of answer may be weak, possibly a series of points.

The candidate shows deficiencies in expression of ideas resulting in frequent confusion and/or ambiguity. Answers lack structure, consisting of a series of unconnected ideas. Psychological terminology is used occasionally, although not always appropriately. Errors of grammar, punctuation and spelling are frequent, intrusive and often obscure meaning.

0 marks

No relevant content

Total AO1 marks for Option A: 4

Total AO2 marks for Option A: 12

Total AO3 marks for Option A: 4

Total marks for Option A: 20

Option B

04 Explain one way in which behaviourists have investigated reinforcement. (4 marks)
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[AO3 = 4]

Most likely answers will deal with the work of Skinner including operant conditioning, positive, negative and secondary reinforcement but accept the work of Pavlov and answers based on the classical conditioning model. The explanation should focus on methodology and might refer to elements of the experimental method or use of animals.

Award marks as follows: 3-4 marks for a sufficiently detailed explanation of how behaviourists investigated reinforcement. For full marks 'reinforcement' must be operational.

1-2 marks for a basic outline /incomplete answer.

05 Briefly discuss one difference between the behaviourist approach and the cognitive approach in investigating behaviour. (4 marks)
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[AO2 = 4]

AO2 Likely answers will deal with cognitive-internal mental processes vs behaviourist-overt behaviour but other possible differences may focus on type of participants (human vs non human species), use of idiographic as well as nomothetic approach for cognitive psychologists.

Award one to two marks for a brief answer or one which lacks clarity or accuracy.

Three to four marks for clear, accurate and sufficiently detailed difference between the behaviourist approach and cognitive approach in investigating behaviour.

06 Discuss the biological approach to the understanding of human behaviour. In your answer, refer to at least two topics that you have studied in psychology. (12 marks)
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[AO1 = 4, AO2 = 8]

By being required to apply the biological approach to topic areas, candidates are invited to make links with other modules at both AS and A2. The requirement to discuss will encourage candidates to reflect on most areas of the specification including other approaches and other debates

AO1 Up to four marks for demonstrating relevant knowledge of how the biological approach is used in understanding behaviour, eg explanations at the level of genes, neurotransmitters, hormones on behaviour, the role of the CNS and in particular the different parts of the brain in behaviour. Marks for biological explanations of topics in psychology, eg gender development, atypical behaviour, memory, autism, criminological psychology, intelligence, etc. Credit descriptions of relevant evidence up to one mark.

AO2 These marks are to be awarded for analysis, for evaluation of the approach including its contributions to an understanding of behaviour. It is expected that candidates will select a topic area, describe, apply and evaluate the biological approach as an explanation of behaviour, making clear the contribution of the approach to an understanding of behaviour. Credit references to other approaches as a means of comparison, to debates, eg nature —nurture, to reductionist explanations and implications for a scientific understanding of behaviour. Credit use of relevant evidence.

Maximum of 8 marks if only one topic area referred to

Mark bands**12-10 marks****Excellent answer**

Explanations of behaviour by the biological approach are clearly stated and applied to at least two topic areas. Descriptive information is relevant, in sufficient detail and accurate. Analysis shows a very sound understanding of the contributions made by the approach to an understanding of behaviour. A good depth of knowledge and understanding is shown and the answer is organised. Any references to studies or to other approaches are presented in the context of the discussion as a whole. A line of argument is clear and the discussion is balanced.

The candidate expresses most ideas clearly and fluently, with consistently effective use of psychological terminology. Arguments are well structured, with appropriate use of sentences and paragraphs. There are few, if any, minor errors of grammar, punctuation and spelling. The overall quality of language is such that meaning is rarely, if ever, obscured.

9-7 marks**Good to average answers**

A generally accurate response but less analysis than for the top band. An attempt to apply the approach to an understanding of at least two topic areas is made at the top and middle of the band, some analysis is attempted and discussion is adequate for both topics or good for at least one. Discussion must be present in the answer but will lack the balance of the top band. Most of the answer is focused but there may be some irrelevance and /or minor understanding. A good answer but only dealing with one topic area will fall at the bottom of this band.

The candidate expresses most ideas clearly and makes some appropriate use of psychological terminology. The answer is organised, using sentences and paragraphs. Errors of grammar, punctuation and spelling may be present but are mostly minor, such that they obscure meaning only occasionally.

6-4 marks**Average to poor answers**

A generally descriptive response with some attempt to outline possible contributions of the approach. There will be little analysis and discussion will be weak. Minimal attempt at applying the contributions to an understanding of one topic area at the top of the band. At the bottom and middle of the band a topic may not be included or there may be some confusion. Descriptive responses will fall into the bottom/middle of the band.

The candidate expresses basic ideas clearly but there may be some ambiguity. The candidate uses key psychological terminology inappropriately on some occasions. The answer may lack structure, although there is some evidence of use of sentences and paragraphs. There are occasional intrusive errors of grammar, punctuation and spelling which obscure meaning.

3-1 marks**Poor answers**

Some relevant points but no analysis. Answers will be brief; knowledge and understanding limited. There will be no attempt to link to topic areas. Structure of answer may be weak, possibly a series of points.

The candidate shows deficiencies in expression of ideas resulting in frequent confusion and/or ambiguity. Answers lack structure, consisting of a series of unconnected ideas. Psychological terminology is used occasionally, although not always appropriately. Errors of grammar, punctuation and spelling are frequent, intrusive and often obscure meaning.

0 marks**No relevant content**

Total AO1 marks for Option B: 4

Total AO2 marks for Option B: 12

Total AO3 marks for Option B: 4

Total marks for Option B: 20

Section B Debates in Psychology

07 Outline what is meant by <i>hypothesis testing</i> and explain the role of hypothesis testing in scientific research. (4 marks)

[AO3 = 4]

Up to 2 marks for definition/outline of what is meant by hypothesis testing, eg a hypothesis is a testable, predictive statement/proposition specifying the relationships between events or variables.

Two further marks for explanation of the role of hypothesis testing in research, eg theories need to be tested by empirical studies, hypothesis testing allows researchers to refute or support a theory, the degree of support determines confidence in a theory. Credit references to the null hypothesis and falsification of a theory

08 Explain what is meant by the nature-nurture debate in psychology. (4 marks)

[AO1 = 2, AO2 = 2]

AO1 One mark for outlining the term nature; genes, innate or inherited factors.
One mark for outlining the term nurture; environment, experience.

AO2 Marks to be awarded for explaining the debate; a controversy within psychology that is concerned with the extent to which particular aspects of a behaviour are a product of either acquired or inherited characteristics.

A further mark for an expansion. Most likely expansions will be areas of controversy such as intelligence (explanations of differences between individuals) or sex role (genes and hormonal influences or socially constructed and reinforced). Marks can be gained for information as to the roots of the debate; nativist philosophy vs empiricism or implications of the debate.

09 "Nomothetic and idiographic approaches are both needed for a complete study of psychology".

Discuss this statement with reference to **at least one** topic area in psychology.

(12 marks)

[AO1 = 4, AO2 = 8]

This question encourages candidates to make links with the AS modules and module 3. Part (c) invites candidates to make links with any topics in psychology and to assess the two approaches both individually and in combination within psychology as a whole.

AO1 Up to four marks for demonstrating relevant knowledge and understanding of the two approaches and for relevant details from the chosen topic area, including research. Answers will probably contain a brief outline of the characteristics of each approach.

AO2 These marks are to be awarded for analysis, by demonstrating awareness of the differences between the two approaches, for evaluation of each approach, for application by links to topic areas. Possible topic areas where both approaches have been applied are memory, gender, and child development. Credit use of relevant evidence to a maximum of three marks.

Maximum of 8 marks if no reference to a topic area

Mark bands

12-10 marks

Excellent answer

The assumptions and methods of the two approaches are clearly identified and thoroughly discussed with reference to at least one topic area. The answer may be supported with specific empirical work. The answer is clearly focused on the question. There are few if any omissions, irrelevancies, or inaccuracies. The answer shows a sound understanding of the approaches including their place in a scientific framework. The discussion is well balanced with a logical and clear conclusion.

The candidate expresses most ideas clearly and fluently, with consistently effective use of psychological terminology. Arguments are well structured, with appropriate use of sentences and paragraphs. There are few, if any, minor errors of grammar, punctuation and spelling. The overall quality of language is such that meaning is rarely, if ever, obscured.

9-7 marks

Good to average answers

Answers at the top and middle of this band must refer to a topic area. A generally accurate response but less analysis than for the top band. An attempt to discuss the quote may lack focus and /or direction. There may be some irrelevance and /or minor understanding. A good answer but failing to deal with one topic area will fall at the bottom of this band.

The candidate expresses most ideas clearly and makes some appropriate use of psychological terminology. The answer is organised, using sentences and paragraphs. Errors of grammar, punctuation and spelling may be present but are mostly minor, such that they obscure meaning only occasionally.

6-4 marks

Average to poor answers

Answers may get little beyond identifying and describing the approaches with minimum application/analysis. Better answers will attempt some discussion and there will probably be some reference to a topic area. Answers in this band will lack detail.

The candidate expresses basic ideas clearly but there may be some ambiguity. The candidate uses key psychological terminology inappropriately on some occasions. The answer may lack structure, although there is some evidence of use of sentences and paragraphs. There are occasional intrusive errors of grammar, punctuation and spelling which obscure meaning.

3-1 marks

Poor answers

Some relevant points but no analysis. Answers will be brief; knowledge and understanding limited. There will be no attempt to link to a topic areas.

Structure of answer may be weak, possibly a series of points.

The candidate shows deficiencies in expression of ideas resulting in frequent confusion and/or ambiguity. Answers lack structure, consisting of a series of unconnected ideas. Psychological terminology is used occasionally, although not always appropriately. Errors of grammar, punctuation and spelling are frequent, intrusive and often obscure meaning.

0 marks **No relevant content**

Total AO1 marks for Section B: 6

Total AO2 marks for Section B: 10

Total AO3 marks for Section B: 4

Total marks for Section B: 20

Section C Methods in Psychology

10 Write a suitable hypothesis for this study. (2 marks)

[AO3 = 2]

2 marks for a one tailed or two-tailed hypothesis which must be a testable statement, include reference to 'significant' differences and two conditions. Eg 'There will be significantly more boys observed playing on the road than girls'.

1 mark for two of the above criteria.

2 marks for all three criteria.

11 A *chi*-test was used to analyse the data. The calculated value of *chi*-square (χ^2) was 8.7. Using **Table 2** below, explain whether or not the result was significant. (2 marks)

[AO3 = 2]

One mark for the comparison of the calculated value (8.7) with the critical value (3.841 or 6.6635)

One mark for the level of probability, either 0.05 or 0.01, both of which significant.

12 Identify **one** factor that the psychologist had to take into account when deciding whether or not to use the *chi*-square (χ^2) test. (1 mark)

[AO3 = 1]

Accept any one of the following; level of measurement-nominal /frequency data, entries in each cell must be independent, the expected number for each cell must not be less than 5 for small sample sizes.

13 The psychologist carried out observations on her own.
Identify **one** methodological problem of her working on her own. (1 mark)

[AO3 = 1]

Likely answer is difficulty of checking the data for reliability-one mark, but also accept observer bias for one mark.

14 Explain how the problem you have identified in Question 13 might have been addressed if another observer had been involved. (2 marks)

[AO3 = 2]

Possible answers; using more than one observer and establishing inter-observer reliability-one mark.

Individual record sheets are compared and checked for similarity-one mark.

Credit any reference to a high positive correlation for one mark.

For 'observer bias' —using an observer who has no knowledge of the prediction being made-one mark

Observer(s) to be given data collection sheet and categories /definitions but remaining blind to the precise hypothesis being stated —one mark.

Maximum of one mark if the explanation is not a solution to the problem identified in **Question 13**.

15 The method used by the psychologist was naturalistic observation. Identify and discuss **one** limitation of this method of research. *(4 marks)*

[AO3 = 4]

AO3 Most likely limitations will deal with lack of control over extraneous variables, ethical issues of consent and invasion of privacy, difficulty of replication.

Discussions may include comparisons with other research methods such as the 'laboratory' experiment. For answers dealing with replication, it is expected that candidates will refer to the scientific method, for control to the scientific method and /or cause and effect connections, for ethical issues to the wider issues and /or ends justifying the means.

Three to four marks for a clearly identified limitation and an argument made and sustained.

One to two marks for an argument raised but not fully developed or an answer lacking in clarity or accuracy.

16 Having established the pattern of play for boys and girls, the psychologist wanted to explore differences between boys' and girls' understanding of the risks associated with playing in the road.

Design a study to investigate gender differences in children's understanding of risks associated with playing in the road. Include in your answer sufficient detail to allow for reasonable replication of the study.

In your answer, refer to:

- an appropriate method of investigation
- materials/apparatus and procedure.

Justify your design decisions.

(8 marks)

[AO3 = 8]

AO3 Answers should include an appropriate method of investigation -likely answers will be use of a questionnaire/survey; formulation of hypotheses if appropriate; details of the procedure including materials used, eg reference to a rating scale or an example of a question / statement; an outline of data collection and /or analysis, eg reference to cumulative scores on a rating scale, comparison of median scores; sampling issues including the sampling method, size and composition of the sample; ethical issues to be taken into account.

Mark bands

8-6 marks

Excellent answers

Answers demonstrate an ability to design an appropriate qualitative or quantitative method explaining the methodology selected in an effective manner. The proposal is coherent and feasible and includes details of most of the essential elements of the design (procedure, materials, data collection, sampling, ethical techniques). There is mainly valid justification throughout and reporting is clear, precise and with the required expansion so that reasonable replication is possible.

5-3 marks

Good to average answers

An appropriate qualitative or quantitative method of investigation is selected though the answer may lack explanation of its suitability. The proposal includes some detail so that an attempt at replication is possible. It may not be entirely feasible or lack the clarity and coherence of the top band. Some valid justification is included.

2-1 marks

Poor answers

Detail of the proposal lacks information so that replication is likely to be very difficult. The method selected may not be obvious. There will be minimal if any justification.

Total AO3 marks for Section C: 20

Total marks for Section C: 20

Specimen Paper
Revised Specification PYB
PSYB4

ASSESSMENT OBJECTIVE GRID

Question	AO1	AO2	AO3	Total
01	0	0	4	
02	0	4		
03	4	8		20
04	0	0	4	
05	0	4		
06	4	8		20
07	0	0	4	
08	2	2		
09	4	8		20
10	0	0	2	
11	0	0	2	
12	0	0	1	
13	0	0	1	
14	0	0	2	
15	0	0	4	
16	0	0	8	20
QWC				3
Total				63