

A-Level

Psychology (Specification B)

PSYB4: Approaches, Debates and Methods in Psychology Final Mark Scheme

2185 June 2017

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Mark schemes are prepared by the Lead Assessment Writer and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation events which all associates participate in and is the scheme which was used by them in this examination. The standardisation process ensures that the mark scheme covers the students' responses to questions and that every associate understands and applies it in the same correct way. As preparation for standardisation each associate analyses a number of students' scripts. Alternative answers not already covered by the mark scheme are discussed and legislated for. If, after the standardisation process, associates encounter unusual answers which have not been raised they are required to refer these to the Lead Assessment Writer.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of students' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

Further copies of this mark scheme are available from aqa.org.uk

Section A Approaches in Psychology

OPTION A

O1 Explain how the psychologist could use the experimental method to investigate observational learning of tidying away lunchtime trays. [4 marks]

AO3 = 4

Award marks for reference to the first 3 bullet points and a further mark (4th bullet):

- Two conditions/groups one exposed to model (live or video etc.) and a control group/not exposed to the model (1 mark)
- Reference to measurement of behaviour/DV (e.g. number of tidying acts performed etc.) (1 mark)
- Random assignment of participants to conditions (1 mark)
- <u>Further mark</u> for any appropriate extra information e.g. participant recruitment; ethics; control of extraneous variables; design of study i.e. independent/repeated etc. (1 mark)

(Note: Credit reference to "Repeated Measures Design")

02 Briefly outline **one** strength and **one** limitation of Social Learning Theory.

[4 marks]

$AO1 = 2 \quad AO2 = 2$

1 mark for a brief outline of a strength of Social Learning Theory and 2nd mark for expansion of the same strength.

1 mark for a brief outline of a limitation of Social Learning Theory and 2nd mark for expansion of the same limitation.

<u>Strengths include</u>: uses controlled experiments to investigate behaviour in humans allowing researchers to make causal inferences; extensive research supports concepts which in turn strengthens the theory (cycle of enquiry); unlike the psychodynamic approach, SLT investigates conscious rational behaviour which is open to empirical testing/replication etc; unlike behaviourists SLT incorporates cognitions/thought processes in learning which can explain cognitive mediating factors such as memory etc. Accept other relevant strengths.

<u>Limitations include</u>: some of the early experiments (Bobo doll) now considered unethical/lacking validity; focus on mental thought does not include unconscious conflicts; largely ignores biological processes, etc.

Accept other relevant limitations of Social Learning Theory.

A number of post-Freudian theories have been developed within the psychodynamic approach. Discuss **two** post-Freudian theories. [12 marks]

AO1 = 4 AO2 = 8

A01

Up to four marks for relevant knowledge and understanding of two post-Freudian theories (n.b. these must be psychodynamic). Usually 2 x A01 marks for each theory. Knowledge will most likely focus on key assumptions/features of the approaches, although there may be some detail of research/case studies. Likely content:

<u>Erikson:</u> Psychosocial development, emphasis on the ego, psychosocial theory has 8 stages of which four are post-puberty; biographical analyses of historical figures (e.g. Martin Luther) pioneered psychohistory, etc.

<u>Klein:</u> Object relations theory, developmental positions, splitting, analysis of child's play, forerunner of the superego appears in first two years of life, analysis needs to examine infantile anxiety, etc.

<u>Jung:</u> Individuation, ego, persona, self, personal/collective unconscious, shadow, archetypes, symbolism, devised word association test, introduced commonly used words – extravert/introvert/complex, libido as non-sexual life force, etc.

Accept other relevant post-Freudian theorists.

Credit description of relevant evidence up to 1 mark.

AO2

Up to eight marks for discussion/analysis of the two theories outlined. The discussion might include comparison with Freud and/or other post-Freudians.

Possible discussion points: Case studies open to different interpretations. Jung's theory expanded on the nature of the unconscious; Jung and Erikson rejected Freud's emphasis on sexual motivation; many ideas/terms have become common usage e.g. inferiority complex. Theories lack falsifiability. Complex theories which cannot be scientifically tested. Most post-Freudian theories emphasise the importance of early childhood experience in understanding adult personalities. Reliance on inference/subjective interpretation etc.

Accept reference to topics/debates/other approaches as part of the discussion if made relevant to the question.

Credit use of relevant evidence.

Maximum 7 marks if reference to only one post-Freudian theory.

Mark bands

10-12 marks Very good answers

The answer is clearly focused on the question and shows good knowledge and understanding of two post-Freudian theories. The answer is well balanced between the two chosen theories. Discussion is full and includes thoughtful analysis. Most evaluative/comparative comments are well developed and presented in the context of the discussion as a whole. The answer is well organised and mostly relevant with little, if any, misunderstanding.

The student expresses most ideas clearly and fluently, with effective use of psychological terminology. Arguments are well structured and coherent, 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 the meaning is rarely, if ever, obscured.

7-9 marks Good answers

Answer shows sound knowledge and understanding of two post-Freudian theories. At the top of the band there should be a reasonable outline and discussion of both theories presented, although this will not be as detailed as the top band. Discussion is evident and the answer is mostly focused on the question although there may be some irrelevance and/or misunderstanding.

The student 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. An exceptional answer dealing with just one post-Freudian theory can gain 7 marks.

4-6 marks Average to weak answers

Answer shows some knowledge and understanding of two post-Freudian theories or reasonable knowledge of one theory. There must be some attempt at discussion/analysis for 5/6 marks. Answers in this band may be mostly descriptive. There may be considerable irrelevance and/or inaccuracy. Answers constituting reasonable relevant information but without proper focus on the question are likely to be in this band.

The student expresses basic ideas clearly but there may be some ambiguity. The student 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.

1-3 marks Poor answers

Answer shows very limited knowledge and understanding but must contain some relevant information in relation to the question. There may be substantial confusion, inaccuracy and irrelevance.

The student 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

OPTION B

O4 Briefly outline the role of the central nervous system and the autonomic nervous system in Karen's experience. [4 marks]

AO1 = 2 AO2 = 2

Up to 2 marks for knowledge of the central nervous system and the autonomic nervous system. (1 mark for CNS and 1 mark for ANS)

Up to 2 marks for application of the knowledge of the role of the CNS and the ANS to Karen. (1 mark for CNS and 1 mark for ANS) **eg applications in brackets below.**

CNS - Answers are likely to focus on:

- Brain/cerebral cortex in higher mental functions/conscious awareness (realised danger/decided to run).
- Auditory cortex/temporal lobe in processing auditory information (growling dog).
- Visual cortex/occipital lobe in processing visual information (saw large dog).

Accept other appropriate answers.

ANS - Answers are likely to focus on:

- Sympathetic division of the ANS and the fight/flight response (froze for moment/increased heart rate)
- Increased action of adrenal glands and energising effect (ran very fast/shaking.
- Dilation of blood vessels to limbs (sweating).

Accept other appropriate points.

05 Explain **one** way that researchers have studied the genetic basis of behaviour.

[4 marks]

AO3 = 4

The answer should focus on **one** clearly identifiable way that researchers have studied the genetic basis of behaviour.

Answers are likely to refer to concordance studies using twins (monozygotic/dizygotic) or family and adoption studies. For example:

Research using twin studies looks at the concordance between twins (MZ - identical and DZ non-identical twins). If identical twins show a higher concordance than non-identical twins for a

particular trait, then this is considered evidence for heritability of that trait. To control for the environment researchers often study identical twins separated at birth and brought up in different environments (e.g. adopted into different households). If there is a high level of concordance for a particular trait, then this is taken as evidence that heritability plays a major role and not environment.

Credit should also be given to more unusual answers such as 'candidate genes' and 'polygenic studies' etc.

Credit reference to genotype/phenotype if linked to the study of the genetic basis of behaviour.

It is possible that answers may focus on a particular topic (e.g. schizophrenia/OCD) and credit should be given if the 'technique for studying the genetic basis of behaviour' is discernible from the example.

- **3-4 marks** The method of investigating the genetic basis of behaviour is appropriate and clearly explained. For full marks the answer should offer a coherent and accurate explanation.
- **1-2 marks** There is an identifiable method of investigating the genetic basis of behaviour and this is briefly explained.
- Outline the main assumptions of the cognitive approach. Discuss **at least one** similarity and **at least one** difference between the cognitive and behaviourist approaches in psychology.

 [12 marks]

AO1 = 4 AO2 = 8

AO1

Up to four marks for knowledge of the main assumptions of the cognitive approach. Possible points:

- Thought (conscious and unconscious) can influence behaviour
- Thought acts as mediational process between stimulus and response
- Mental processes can be regarded as information processing
- The computer analogy
- Damage to parts of the brain affect cognitions (cognitive neuropsychology)
- Mental processes can be studied scientifically

Accept other relevant assumptions.

AO₂

Up to eight marks for discussion and analysis of at least one similarity and at least one difference identified between the behaviourist and cognitive approaches.

<u>Similarities include</u>: Both use controlled scientific studies which allow for prediction/replication etc., both take a similar position on some of the debates e.g. reductionism, both have therapies that share some principles e.g. CBT, etc.

<u>Differences include</u>: The cognitive approach deals with cognitive-internal mental processes whereas the behaviourist approach deals with overt behaviour; the cognitive approach generally uses human participants whereas the behaviourist approach makes use of non-human species. Cognitive psychologists use idiographic as well as nomothetic approaches whereas the behaviourist approach tends to use only nomothetic, behaviourist approach is nurture whereas cognitive is nature and nurture, behaviourism is determinist whilst cognitive is soft determinism, etc.

(NB: These similarities/differences may be embedded in the discussion)

Accept a counter-argument as part of the analysis, which could (for example) be credited as a discussion of the similarity or as an identified difference. For example, they are both nomothetic and attempt to establish general laws of behaviour but the cognitive approach also makes use of some idiographic qualitative methods too.

Accept reference to topics/debates/other approaches as part of the discussion if made relevant to **this** question.

Credit use of relevant evidence.

Maximum 7 marks if only one aspect covered (similarity or difference).

Mark bands

10-12 marks Very good answers

The answer is clearly focused on the question and shows good knowledge and understanding of the assumptions of the cognitive approach. There is discussion of at least one similarity and at least one difference between the behaviourist and cognitive approaches. Discussion is full and includes thoughtful analysis. Most comparative points are well developed and presented in the context of the discussion as a whole. The answer is well organised and mostly relevant with little, if any, misunderstanding.

The student expresses most ideas clearly and fluently, with effective use of psychological terminology. Arguments are well structured and coherent, 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 the meaning is rarely, if ever, obscured.

7-9 marks Good answers

Answer shows sound knowledge and understanding of the assumptions of the cognitive approach. At the top of the band there will be at least one similarity and at least one difference identified and outlined. Discussion is evident although this will not be as full as the top band discussion and analysis. The answer is mostly focused on the question although there may be some irrelevance and/or misunderstanding.

The student 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.

4-6 marks Average to weak answers

Answer shows some knowledge and understanding of the assumptions of the cognitive approach. There must be some attempt at discussion/analysis for 5/6 marks. Answers in this band may be mostly descriptive. There may be considerable irrelevance and/or inaccuracy. Answers constituting reasonable relevant information but without proper focus on the question are likely to be in this band.

The student expresses basic ideas clearly but there may be some ambiguity. The student 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.

1-3 marks Poor answers

Answer shows very limited knowledge and understanding but must contain some relevant information in relation to the question. There may be substantial confusion, inaccuracy and irrelevance.

The student 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

Section B Debates in Psychology

07 Briefly explain **two** strengths of the idiographic approach in psychology.

[4 marks]

AO2 = 4

One mark for each relevant strength briefly explained and further mark for expansion of each strength.

Likely strengths: provides a more complete understanding of the individual than the nomothetic approach; satisfies some of the key aims of science – description/understanding of behaviour; findings can serve as a source of ideas for nomothetic studies; unique cases can serve to challenge general laws of behaviour, etc.

Credit other relevant strengths. Credit comparisons with the nomothetic approach. Credit relevant reference to a topic area.

Outline what is meant by a 'hypothesis' and explain the role of hypothesis testing in scientific research.

[4 marks]

AO3 = 4

Up to 2 marks for outline of what is meant by a hypothesis, e.g. a hypothesis is a testable statement/proposition (1) specifying the relationship between events or variables (1).

Two further marks for explanation of the role of hypothesis testing in scientific research, e.g. 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, etc.

Credit reference to the null hypothesis and falsification of a theory; moving psychology forward as a science.

Discuss the free will and determinism debate in psychology. Refer to at least one topic in your answer.[12 marks]

$AO1 = 4 \ AO2 = 8$

AO1

Up to 4 marks for knowledge and understanding of the free will and determinism debate. Maximum 1 mark for definition of the debate e.g.: whether the behaviour is caused by the will/choice of the individual/under the control of the individual or caused by forces over which the person has no control.

Credit outline of internal/external forces. Credit reference to types of determinism: hard, soft, biological, psychic and environmental determinism.

Accept references to free will as an 'illusion' (Skinner).

Credit description of relevant evidence up to 1 mark.

AO2

Up to eight marks for analysis of the debate and the topic(s) discussed. Candidates may discuss the implications of the causes of behaviour for moral responsibility and for psychology as a science. Discussion points might include problems with 'freewill' and the difference between free will and soft determinism. Likely topic areas are social influence, particularly Milgram's findings on obedience to authority, gender, aggression, phobias, mood disorders, substance abuse and offending behaviour. Credit analysis in relation to approaches - most likely the humanistic, psychodynamic and behaviourist approaches, and reference to other debates such as reductionism v holism.

Credit use of relevant evidence.

Maximum 8 marks if no reference to a topic.

Mark bands

10 - 12 marks Very good answers

The answer is clearly focused on the question and shows sound knowledge and understanding of the free will and determinism debate. There is appropriate reference to at least one topic. Discussion is full and includes thoughtful analysis. The answer is well organised and mostly relevant with little, if any, misunderstanding.

The candidate expresses most ideas clearly and fluently, with effective use of psychological terminology. Arguments are well structured and coherent 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 the meaning is rarely, if ever, obscured.

7 - 9 marks Good answers

Answer shows knowledge and understanding of the free will and determinism debate. There is evidence of discussion although the answer will not be as coherent as the top band answer. At the top of the band there is reference to at least one topic. The answer is mostly focused on the question although there may be some irrelevance and/or misunderstanding.

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.

4 - 6 marks Average to weak answers

Answer shows some knowledge and understanding of the free will and determinism debate. There must be some discussion for 5/6 marks. Answers in this band may be mostly descriptive. There

may be considerable irrelevance and/or inaccuracy. Answers constituting reasonable relevant information but without proper focus on the question are likely to be in 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.

1 - 3 marks Poor answers

Answer shows very limited knowledge and understanding but must contain some relevant information in relation to the question. There may be substantial confusion, inaccuracy and /or irrelevance. 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 ad spelling are frequent, intrusive and often obscure meaning.

0 marks No relevant content

Section C Methods in Psychology

The questionnaire only included closed questions. Briefly discuss one limitation of using closed questions.
[2 marks]

AO3 = 2

1 mark for a brief outline of a limitation of using closed questions.

2nd mark for an expansion of the point which might be a counter-argument.

Possible limitation

Restriction of participants' responses/lack of depth and detail/acquiescence response bias/response set, etc.

The researcher constructed and administered the questionnaire herself. Explain **one** reason why this might have been a problem in this study. [2 marks]

AO3 = 2

1 mark for a brief explanation of a possible problem.

2nd mark for an expansion (related to this study).

Possible problems

Bias/subjectivity of researcher/confirmatory bias, etc.

12 The researcher wanted to check the reliability of the questionnaire.

Explain what is meant by 'reliability' and outline **one** way of checking the reliability of this questionnaire. [3 marks]

AO3 = 3

1 mark for a clear explanation of 'reliability', i.e.

The extent to which the questionnaire produces consistent results.

2 further marks for the outline of the chosen way of checking reliability -1 mark for brief outline and 2^{nd} mark for expansion which relates to expected results.

Possible ways of assessing reliability:

Test-retest – external reliability, give the same questionnaire to the same participants on a second occasion and if the same/similar results obtained the questionnaire is reliable.

The split-half method – internal reliability, split the test in two and expect strong positive correlation of the scores from the two halves.

The researcher wanted to check the validity of the questionnaire. Explain what is meant by validity and outline **one** way of checking the concurrent validity of this questionnaire.

[3 marks]

AO3 = 3

1 mark for a clear explanation of 'validity', i.e.

The extent to which the questionnaire measures what it purports to measure.

2 further marks for the outline of the way of checking concurrent validity -1 mark for brief outline and 2^{nd} mark for expansion which relates to the results of the correlation.

Way of assessing concurrent validity:

The participant scores on this questionnaire should be correlated with the participant scores on another (independent) scale/questionnaire which measures 'Attitudes to Healthy Eating' and is known to be valid. There is concurrent validity if there is a strong positive correlation between the scores on the 2 different questionnaires/similar scores are found.

14 Explain why the median is an appropriate measure of central tendency for this study.

[1 mark]

AO3 = 1

1 mark for a clear explanation, e.g.:

The questionnaire produced data that are not interval (accept ordinal).

Accept alternative explanations.

Outline what the researcher could conclude from the medians **and** the ranges in **Table 1** on page 4. Justify your answer. [2 marks]

AO3 = 2

1 mark for a conclusion re median with justification - girls (say they) eat more healthily than boys – girls' median (14) higher than boys' median (9)

1 mark for a conclusion re range with justification - less variability in girls (2) than boys (7)

The researcher used a Mann-Whitney U statistical test on the data. The test was a 2-tailed test, and the chosen level of significance was $p \le 0.05$. The calculated value of *U* was 106.

Explain whether or not the null hypothesis can be rejected. Refer to the table of critical values (below) in your answer. [2 marks]

AO3 = 2

1 mark for rejection of null hypothesis

 2^{nd} mark for explanation – i.e. calculated value of U=106 is less than the critical value of U=127,[p<0.05, 2-tailed, N1=20, N2=20].

- **17** Explain how the sample could be selected and the interviews conducted. In your answer you should:
 - explain how the two boys and two girls could be selected. Justify your decision.
 - suggest a suitable location for the interview. Justify your decision.
 - explain ethical considerations
 - provide a brief introduction that can be read out to the boys and girls at the start of the interviews.

[5 marks]

AO3 = 5

- Accept any relevant sampling method. Expect details of how the method would be applied in this study.
- Reference to quiet, private room for individual interviews.
- As the sample is of children, reference to at least consent, protection and confidentiality required. (Credit this information even if only in the standard instructions.)
- The introduction should be verbatim.
- **5 marks** All 4 points addressed with little misunderstanding.
- **3-4 marks** Award 4 marks for at least 3 points addressed Award 3 marks if 2 points are fully addressed;
- **1-2 marks** 2 marks for 1 point fully addressed or 1 mark for a muddled attempt

PSYB4 JUNE 2017 Assessment Objectives Grid

Question	AO1	AO2	AO3	Total	
1			4	4	
2	2	2		4	
3	4	8		12	
4	2	2		4	
5			4	4	
6	4	8		12	
7		4		4	
8			4	4	
9	4	8		12	
10			2	2	
11			2	2	
12			3	3	
13			3	3	
14			1	1	
15			2	2	
16			2	2	
17			5	5	
Total	10	22	28	60	