

A-LEVEL

Psychology (Specification B)

PSYB4 Approaches, Debates and Methods in Psychology

Mark scheme

2185

June 2016

Version 1.0: Final Mark Scheme

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

01 Outline the **first two** stages of Freud's theory of psychosexual development.

[2 marks]

AO1 = 2

One mark each for an outline of oral and anal stages, with some detail (not just naming).

For example, the outline might include: approximate ages/conflict/fixation point/libidinal energy focused on different parts of the body etc.

02 Explain Sergei's 'fear of castration'. Refer to the relevant stage of Freud's theory of psychosexual development in your answer.

[2 marks]

AO2 = 2

One mark for a clear explanation of castration anxiety with reference to the phallic stage **and** the Oedipus complex/conflict.

Plus

One mark for an effective explanation of the wolf as a symbol/manifest vs latent or unconscious content.

03 Discuss **at least one** criticism of Freud's interpretation of his case studies. Refer to Sergei in your answer.

[4 marks]

AO3 = 4

Award up to 4 marks for a discussion of at least one criticism linked to Freud's interpretation of Sergei's case study.

Maximum 3 marks if no explicit reference to Sergei but the criticism is appropriate and there is some discussion.

The answer might be in the form of a detailed discussion of one criticism, or there might be several criticisms presented in less detail.

Marks can be awarded for a counter-argument ie a brief discussion of why it may not be a criticism.

Criticisms of Freud's interpretations are likely to focus on:

- Freud fitted his case studies into his existing theory of psychosexual development;
- Freud took no notes during his sessions and relied on memory – which is fallible;
- Freud's interpretations relied on hypothetical constructs that are not testable etc.
- Freud's interpretations relied on the existence of unconscious motives;

Possible Application:

- There are more parsimonious explanations for Sergei's behaviour e.g. a learned fear from hearing the fairy tale;
- Freud's interpretation of Sergei's recurring nightmare is subjective.

04 Outline **and** compare social learning theory and operant conditioning.

[12 marks]

(AO1 = 4; AO2 = 8)

AO1

Up to 4 AO1 marks to be awarded for knowledge and understanding of the key assumptions/features of the two approaches, which might include:

(a) operant conditioning concepts, such as: learning, consequences of behaviour; positive and negative reinforcement; punishment; schedules of reinforcement etc.

(b) social learning theory concepts, such as: observational learning; expectancy and cognitive processes; identification; imitation; modelling etc.

Usually 2 marks for each theory outlined.

AO2

Up to 8 marks for comparison and discussion/analysis of the similarities and/or differences between social learning theory and operant conditioning.

Similarities include: Role of reinforcement; behaviour is learnt; controlled scientific studies etc.

Differences include: SLT distinguishes between learning and performance whereas operant conditioning theorists see them as the same thing, Operant conditioning research often uses animals whereas SLT do not see animals and humans as the same; importance of expectancy/cognitive processes; SLT focus on vicarious reinforcement and punishment etc.

Credit references to topics/debates that illustrate similarities/differences. For example, social learning theory is considered a soft determinist approach whereas operant conditioning is hard determinism.

Accept a counterargument as part of the discussion; for example, the concept of reinforcement is both a similarity between operant conditioning and social learning theory but it is also a difference with respect to the SLT concept of vicarious reinforcement which is not a feature of operant conditioning.

Credit use of relevant evidence.

Mark bands

10-12 marks Very good answers

The answer is clearly focused on the question and shows sound knowledge and understanding of both social learning theory and operant conditioning. Comparison is effective and includes thoughtful analysis. Most comparative comments are well developed and presented in the context of the answer 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 knowledge and understanding of both social learning theory and operant conditioning. Comparison is evident but will not be as detailed as the top band. However, at the top of the band similarities and/or differences are clear with some 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 both social learning theory and operant conditioning. There must be some attempt at comparison 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

05 Explain how counterbalancing could have been used in the above experiment.

[2 marks]

AO3 = 2

Award 2 marks for a clear and accurate explanation plus appropriate application to this study.

One mark for a partial or muddled explanation or accurate definition but no link to this study.

06 Briefly explain **one** strength of using a laboratory experiment to investigate human cognitive processes.

[2 marks]

AO3 = 2

Two marks for an explanation of one strength linked to the use of laboratory experiments to investigate human cognitive processes.

Strengths might include: the high level of control; can infer cause and effect; all participants have the same experience, highly scientific; objective etc.

Award 1 mark for a brief explanation of one strength, second mark for elaboration / link to a cognitive process.

07 Outline **two** assumptions of the cognitive approach. For **each** assumption, illustrate your answer with reference to a topic in psychology. Use a different topic for each assumption.

[4 marks]

AO1 = 2; AO2 = 2

AO1

One mark for each assumption clearly outlined.

Allow only one mark for two assumptions identified but not outlined.

Likely content: thought acts as mediational processes between stimulus and behavioural response; mental processes can be regarded as information processing; computer analogy/mind operates in a similar way to a computer; the use of models to represent mental processes; the role of schemas; mental processes can be scientifically studied etc.

AO2

One mark to be awarded for linking each assumption to a topic. Answers may refer to a variety of topics, eg

For – ‘thought acts as mediational processes between stimulus and behavioural response’ relevant topics might include: observational learning; insight learning; cognitive maps; depression etc

For - ‘mental processes can be regarded as information processing’ relevant topics might include: memory; cognition and law (holistic form theory) etc.

For - ‘computer analogy/mind operates in a similar way to a computer’ relevant topics might include: memory (Atkinson & Shiffrin’s MSM, serial processing; WMM/Connectionist models of memory, parallel processing) etc

For – ‘mental processes can be scientifically studied’ relevant topics might include: memory, perception, language, problem solving, stress (eg locus of control) etc

For – ‘role of schemas’ relevant topics might include: cognitive development, depression, gender etc.

N.B. - the assumption might be embedded in the topic.

08 Discuss **at least two** differences between the humanistic approach and the biological approach in psychology. Refer to **at least one** topic in your answer.

[12 marks]

AO1 = 4; AO2 = 8

AO1

The AO1 marks are for knowledge and outline of at least two differences between the two approaches. Maximum 2 marks for simply outlining the key assumptions/features of the approaches:

Differences include: Individuals can choose behaviour (freewill) according to the humanistic approach vs. biological determinism; scientific research methods used by biological approach vs. non-scientific methods adopted by humanists; study of subjective experience/phenomenology (humanistic) vs. focus on objectivity (biological) etc.

Note that the AO1 might be embedded in the discussion.

Other assumptions/features of the two approaches which may be used to illustrate differences include:

(a) Humanistic approach: humans rational/conscious beings; holistic; humans and animals dissimilar etc.

(b) Biological approach: physiological processes underlie behaviour; the role of the CNS and chemical processes; evolutionary basis of behaviour including genetics etc.

AO2

Up to 8 marks for discussion and analysis of at least two differences identified between the humanistic and biological approaches.

Accept a counterargument as part of the analysis. This could be, for example if a difference in methodology was being discussed, that although the biological approach adopts scientific research methods such as experiments and physiological measures, and the humanistic approach largely uses non-scientific methods such as unstructured interviews, there has been an attempt to introduce more scientific methods by humanists such as the Q-sort/POI developed by Rogers.

Expect reference to at least one topic which might come from a variety of areas, eg Treatments (drug therapy, client-centred therapy); Research methods – eg twin studies etc for Sz/depression/substance abuse etc.

Credit reference to debates as part of the discussion.

Credit use of relevant evidence.

Maximum 8 marks if there is no reference to a topic.

Maximum 8 marks if only 1 difference.

Mark bands

10-12 marks Very good answers

The answer is clearly focused on the question and shows sound knowledge and understanding of at least two differences between the biological approach and the humanistic approach. The differences are clearly identifiable. Discussion is full and includes thoughtful analysis. Most comparative/evaluative 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 knowledge and understanding of at least one difference between the biological approach and the humanistic approach. At the top of the band at least two differences are identifiable and there is some discussion of each difference. Analysis 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.

4-6 marks Average to weak answers

Answer shows some knowledge and understanding of difference(s) between the two approaches. There must be some attempt at discussion/contrast/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

09	Explain what psychologists mean by ‘empirical methods’.	[2 marks]
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(AO3 = 2)

A 1 mark answer will show some understanding of processes related to empiricism e.g. replication, quantitative data, scientific nature, controlled research e.g. experiments/observations etc.

For 2 marks answer should refer to ‘direct sensory experience’/objectivity.

10	Outline one limitation of the scientific approach in psychology.	[2 marks]
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(AO3 = 2)

Award 1 mark for identification and brief outline of an appropriate limitation. Further mark for expansion as to why this is a limitation. This may be in the form of an example.

Answers are likely to focus on: mechanistic, deterministic view of human thought and behaviour; view of people as predictable and controllable; reductionist view of human nature; use of empirical methods leads to lack of ecological validity; scientific methods more open to sources of bias and demand characteristics etc.

11	Discuss one advantage of taking a reductionist position on the holism and reductionism debate. Refer to an example in your answer.	[4 marks]
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(AO2 = 4)

- 1 mark** for an outline of an advantage.
- 1 mark** for elaboration of same advantage.
- 1 mark** for an example to illustrate that advantage.
- 1 mark** for contrast with holism.

Advantages are likely to focus on: scientific way of attempting to understand, predict, control and explain human behaviour; the scientific investigation of component parts allows for empirical investigation and theory to be investigated and tested (eg memory); the reductionist approach demonstrates the importance of biology to understanding and explaining human behaviour eg the role of genes; enables the development of treatments.

Accept answers that refer to different levels of explanation to explain human thought and behaviour if used as part of the discussion.

Examples might refer to:
 Topics: eg schizophrenia, mood disorders, stress etc;
 Approaches: eg biological, behaviourist etc;
 Methods: eg scientific reductionism.

12 In the context of the nature–nurture debate, discuss this view.

[12 marks]

(AO1 = 4; AO2 = 8)

AO1

Up to 4 marks for relevant knowledge and understanding of the main features of the nature-nurture debate. Given the quote that is to be discussed, expect better answers to focus on the nurture side of the debate.

Award maximum 1 mark for a definition of the debate ie. whether nurture (environment) is more or less important than nature (heredity) in determining psychological characteristics.

Further AO1 marks for knowledge and understanding relevant to the nature-nurture debate, including explanations of behaviour relating to both nature and nurture; knowledge and understanding of relevant terminology such as nativism, empiricism, interactionism, shared and non-shared environments, pre- and post-natal environments; heritability coefficient; methods of research used in relation to the debate etc.

Credit knowledge of link to behaviourist approach.

Maximum 1 mark for description of evidence.

AO2

Up to 8 marks for discussion of behaviourist view in relation to the nature-nurture debate. Answers will possibly link to topic(s) in which case discussion will depend on the topic(s) chosen; students may decide to choose a topic that agrees with the quote (say, behaviourist explanations/treatments for anxiety) or a topic that argues against the quote (such as biological explanations for schizophrenia) – or both.

One mark should be reserved for an accurate reference to the behaviourist view as being on the extreme nurture side of this debate.

Credit reference to relevant approaches if they are presented as part of the discussion.

Credit reference to other debates/interactionism **only** if they are presented as part of the discussion.

Mark bands

10 - 12 marks Very good answers

The answer is clearly focused on the question and shows sound knowledge and understanding of the nature-nurture debate. Discussion is full, includes thoughtful analysis and appropriate links to the nurture view expressed in the stem. Answers have clearly discussed the behaviourists' position on the nurture side of this debate. 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 nature-nurture debate. There is evidence of discussion appropriately linked to the nurture view expressed in the stem, although the answer may not be as coherent as the top band answer. 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 nature-nurture 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 and spelling are frequent, intrusive and often obscure meaning.

0 marks No relevant content

Section C Methods in Psychology

13 Write a suitable hypothesis for this experiment.

[2 marks]

AO3 = 2

Award 2 marks for an appropriate hypothesis that contains all components: Identifies (and operationalises) the IV and DV.

Award 1 mark for **either (i)** a muddled hypothesis, but which attempts **both** IV and DV,

Or (ii) for a good hypothesis with superfluous information e.g. prefaced with an aim.

Accept directional, non-directional (can also credit null hypothesis).

For example:

There will be a (significant) difference in test scores between the participants in the ‘texting’ condition and participants in the ‘non-texting’ condition.

Do not accept just “scores” for an operationalised DV.

14 Using the descriptive statistics from above, construct and label a table to display the data.

[2 marks]

AO3 = 2

Award 2 marks for the table. For full marks the table should include:

- a title, including reference to the two conditions and the DV
- row and column labels,
- accurate data regarding the mean and sd.

If one of the above bullet points is missing, award 1 mark only.

If more than 1 of the above bullet points is missing award 0 marks.

Example Table:

A table to show the mean and s.d. for MCQ scores for the texting and non-texting conditions.

	Texting	Non-Texting
Mean	5.50	8.25
S.D	3.16	1.01

15 Write a brief interpretation of the research findings. Comment on homogeneity of variance in your answer. **[3 marks]**

AO3 = 3

Award 1 mark each for:

- Appropriate reference to the mean difference e.g. mean is higher in the non-texting condition.
- Appropriate reference to the standard deviation e.g. the spread of scores is greater in the texting condition.
- There is no Homogeneity of Variance in this case (unlikely).

16 Name an appropriate non-parametric test that the researchers could have used to analyse the data. **[1 mark]**

AO3 = 1

Award 1 mark for the identification of the Mann-Whitney (U) Test.

17 Outline and explain **two** extraneous variables that might have affected the results of this study. **[4 marks]**

AO3 = 4

2 marks available for each Extraneous Variable.

Award 1 mark for a brief outline of a plausible extraneous variable and award 2nd mark for clear and coherent elaboration e.g. explaining how the outlined extraneous variable might have affected the results on this study.

Possible Extraneous Variables include:

Some students may simply have better memories/attention etc. and this (not the manipulation of the IV) would account for their superior performance.

Random allocation may have resulted in mainly Male or Female in one condition etc. and therefore these students perform better because

Participants may have spent differing amounts of time actually engaged in texting.....

Students in the texting condition may have responded to messages from other people as well as from researchers.....

Some students might be more interested in the subject (new novel) and therefore would be more motivated to pay attention.....

Any difference between conditions may be due to a difference in presenters eg male presenter for the texting condition and female presenter for the non-texting condition.....

Having students responding to texts might have put the teacher off so his delivery was not as good, resulting in

(Credit other relevant answers).

18 Explain **one** reason why the students in this investigation were not informed of the full details of the study beforehand. **[2 marks]**

AO3 = 2

Award 1 mark for identifying/briefly outlining a reason.

Award 2 marks for a coherent explanation of why students in this study were not given full information about the study beforehand.

The most likely reason is because of demand characteristics. This may not be named, but should be identifiable and explained for 2 marks.

19 As part of the procedure for this experiment students were given a set of standardised instructions and were fully debriefed at the end of their participation.

Write a set of standardised instructions that could have been used in the ‘texting’ condition of this experiment.

Write a debriefing that could have been read out to **all** the students at the end of this experiment. **[6 marks]**

3 marks for the standardised instructions

3 marks for the debrief.

AO3 = 3

Standardised Instructions:

1 mark for each bullet point.

- Information to the participants about what will take place eg 15 minute PP presentation, MCQ etc
- Instructions re: mobiles must be switched on (vibrate) and responding to texts
- Reminder of the participants right to withdraw at any time during the study.

If students fail to provide the information in verbatim format deduct 1 mark.

AO3 = 3

Debrief:

1 mark for each bullet point.

- Reference to at least one ethical issue, e.g. right to withdraw, confidentiality, permission to use data, right to see the Report, opportunity to ask questions etc.
- The aim/hypothesis of the study.
- An explanation of the two conditions.

If students fail to provide the information in verbatim format deduct 1 mark.

PSYB4 JUNE 2016

Question	AO1	AO2	AO3	Total
1	2			2
2		2		2
3			4	4
4	4	8		12
5			2	2
6			2	2
7	2	2		4
8	4	8		12
9			2	2
10			2	2
11		4		4
12	4	8		12
13			2	2
14			2	2
15			3	3
16			1	1
17			4	4
18			2	2
19			6	6
Total	10	22	28	60