



**General Certificate of Education**

**Psychology 2186**

*Specification B*

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

**Mark Scheme**

*2010 examination – June series*

Mark schemes are prepared by the Principal Examiner and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation meeting attended by all examiners and is the scheme which was used by them in this examination. The standardisation meeting ensures that the mark scheme covers the candidates' responses to questions and that every examiner understands and applies it in the same correct way. As preparation for the standardisation meeting each examiner analyses a number of candidates' scripts: alternative answers not already covered by the mark scheme are discussed at the meeting and legislated for. If, after this meeting, examiners encounter unusual answers which have not been discussed at the meeting they are required to refer these to the Principal Examiner.

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## Section A Approaches in Psychology

**Topic: Biological, Behaviourist, Social Learning, Cognitive, Psychodynamic, Humanistic Approaches and Comparison of Approaches Option A.**

### Question 01

**[AO3 = 4 marks]**

**AO3** Award marks on a point for point basis as follows:

- Exposure to a model-live or other eg video/TV (1)
- Use of different conditions/groups eg an experimental group exposed to model tidying a classroom and a control group not exposed to such a model (1)
- Some form of measurement of behaviour eg the number of 'tidying' acts performed (1)
- Random assignment of participants to conditions (1)
- Reference to manipulation of IV (1)
- Measurement of DV (1)
- Control of variables relevant to this study (1)

### Question 02

**[AO2 = 2 marks]**

**AO2** Award up to two marks for the correct application of positive reinforcement to Helena eg the teacher gives Helena something she likes, wants or needs such as an extended break, praise, attention, reduced homework, after the appropriate response (attending on time).

### Question 03

**[AO2 = 2 marks]**

**AO2** Up to two marks for an explanation which is accurate and identifies negative reinforcement. Such answers should refer to the students repeating the desired response (being punctual) in order to avoid the unpleasant consequence of parent's being phoned or an after school detention.  
Credit avoidance learning ie arriving on time to avoid punishment.

Examiners must take care not to accept answers which apply punishment to the students rather than negative reinforcement.

## Question 04

[AO1 = 4 marks, AO2 = 8 marks]

**Examiners must read the whole response prior to marking in order to make a band judgement about whether the response is Very Good (10-12 marks), Good (7-9 marks), Average to Weak (4-6 marks) or Poor (1-3 marks). Examiners should be guided by the band judgement when annotating scripts.**

**AO1** Up to four marks for knowledge and understanding of an eclectic approach such as combining different approaches; can take different forms eg theoretical, methodological or applied; may include information from other sciences eg biochemistry which is incorporated into psychological explanations.  
Candidates may gain credit through reference to specific examples.  
Credit description of relevant evidence up to one mark.

**AO2** Up to eight marks for analysis, evaluation and application of knowledge.  
Discussions may focus on application to topic areas and are likely to take a theoretical approach. Possible topic areas are gender, memory, anxiety disorders, autism, cognitive development, schizophrenia, mood disorders, stress, substance abuse, offending behaviour; methods in psychology.  
Evaluation should include strengths and limitations. Possible strengths: an eclectic approach may provide a fuller and richer picture/many topics in psychology can be better understood by integrating findings from several approaches. Possible limitations; difficult to identify the individual contributions of each approach; practical difficulty in investigating the integration of the approaches.  
Expect also discussions based on an eclectic approach to therapy/applied psychology (eg stress management) and methods of research.  
Credit use of relevant evidence.

**Maximum 8 marks if there is 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 eclectic approach in psychology. Discussion is full and includes thoughtful analysis. Most 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 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 eclectic approach in psychology. Discussion is evident and the answer is mostly focused on the question although there may be some irrelevance and / or misunderstanding. At the top of the band references to a topic are apparent though these are perhaps not linked so clearly to the discussion as for the top 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.

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

Answer shows some knowledge and understanding of the eclectic approach in psychology. 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**

**Topic: Biological, Behaviourist, Social Learning, Cognitive, Psychodynamic, Humanistic Approaches and Comparison of Approaches Option B.**

**Question 05**

**[AO3 = 4 marks]**

**AO3** Up to two marks for each technique or method.  
One mark for an appropriate way identified plus a further mark for elaboration.

Possible answers: experiments/laboratory based studies; computer programs which mimic the processes and outputs of human cognitive processes; computer models eg face recognition programmes, problem solving programmes (GPS), language programmes, diagnostic programmes; case studies - studying brain processes in patients with damage to their brains; scanning techniques and electrical recording, introspection.

Credit elaboration by example.

Credit other relevant answers.

**Question 06**

**[AO2 = 4 marks]**

**AO2** Up to four marks for application and explanation.  
One mark for merely identifying one or more features.  
Most likely features are: the unconscious mind; instinctual forces; childhood experiences; psychosexual stages; fixation; Oedipus complex; personality structure; superego; psychodynamic conflict; defence mechanisms; repression.  
Up to two marks for explanation of the feature(s) in relation to the behaviour.  
Behaviours selected for explanation will probably come from topic areas such as gender identity, anxiety, moral development, offending behaviour, but accept any plausible behaviour eg aggression.  
One mark for comment, evaluation in relation to the stem/usefulness of explanation.

Exemplar answer: The Oedipus Complex (1) has been used to explain gender identity. According to Freud, boys have to overcome the Oedipus Complex (love of mother, hatred and fear of father) by indentifying with him (1). This means adopting his behaviour, values and morals. In this way the boy becomes like the father and therefore 'male' (1). However this explanation does not explain why boys from single parent (mother) families, develop a healthy gender identity (1).

### Question 07

[AO1 = 4 marks, AO2 = 8 marks]

**Examiners must read the whole response prior to marking in order to make a band judgement about whether the response is Very Good (10-12 marks), Good (7-9 marks), Average to Weak (4-6 marks) or Poor (1-3 marks). Examiners should be guided by the band judgement when annotating scripts.**

**AO1** Up to four marks for relevant knowledge and understanding of the biological approach in psychology. This most likely will focus on the key assumptions of the approach: role of the genes, neurological processes (brain), hormones, nervous system and neurochemistry in behaviour. Credit reference to methodology and use of appropriate terminology eg reductionist, deterministic etc.  
Credit description of relevant evidence up to one mark.

**AO2** Up to eight marks for analysis, comparisons with other approaches, evaluation of the approach including its contributions and application of knowledge.  
Discussion may focus on comparison with one other approach though candidates may well broaden their discussion to include more than one. All approaches are acceptable but most likely will be the behaviourist approach. Credit references to debates eg nature-nurture, to reductionist explanations and implications of a scientific approach to investigating behaviour.  
Examiners must take care not to be drawn into an answer focused primarily on the nature - nurture debate.  
Credit use of relevant evidence.

**Maximum 8 marks if there is no reference to another approach.**

#### Mark bands

##### **10 - 12 marks Very good answers**

The answer is clearly focused on the question and shows sound knowledge and understanding of the biological approach. Discussion is full and includes thoughtful analysis. Most 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 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 biological approach. Discussion is evident and the answer is mostly focused on the question although there may be some irrelevance and / or misunderstanding. At the top of the band references to at least one other approach are apparent though these are perhaps not linked so clearly to the discussion as for the top 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.

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

Answer shows some knowledge and understanding of the biological approach. 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 B Debates in Psychology

### Topic: Debates in Psychology

#### Question 08

[AO3 = 2 marks]

**AO3** Up to two marks for explaining the role of theory in scientific research. Answers should refer to: generating testable hypotheses- implying hypotheses which offer testable predictions of observations or facts organized by the theory; gives purpose and direction to research. Accept answers embedded in an example. Two marks for any of the above features in detail or both briefly stated. One mark for an incomplete or vague answer

#### Question 09

[AO3 = 2 marks]

**AO3** Up to two marks for explaining the role of peer review in scientific research. Answers will probably refer to: validating research; values and responsibilities of scientists; ensuring integrity; ensuring the quality of the research and relevance of research; acceptability of research reports for publication; funding approval. Accept one or more points as above. One mark for each valid point or two marks for one point elaborated.

#### Question 10

[AO1 = 2 marks, AO2 = 2 marks]

**AO1** One mark for a clear and coherent outline of the meaning of 'interactionist approach'. Behaviour due to combined influences of nature and nurture. One mark for elaboration eg what is meant by nature/what is meant by nurture or reference to phenotype/genotype distinction.

**AO2** Up to two marks for application to Jamie. Two marks for detailed application. One mark for incomplete or vague answers.

Answers along the lines of:

- Jamie has inherited a genetic disorder (nature). However whether or not the effects of this condition are expressed depend on the environment (nurture). It is not possible to separate nature and nurture.

or

- Had Jamie's parents not followed the doctors' advice then it would not be possible to say that genetic factors caused low intelligence. Neither could it be claimed that the environment caused the low intelligence. It is not possible to separate nature and nurture.

## Question 11

[AO1 = 4, AO2 = 8]

**Examiners must read the whole response prior to marking in order to make a band judgement about whether the response is Very Good (10-12 marks), Good (7-9 marks), Average to Weak (4-6 marks) or Poor (1-3 marks). Examiners should be guided by the band judgement when annotating scripts.**

**AO1** Up to four marks for demonstrating knowledge and understanding relevant to the question.

Maximum of one mark for knowledge of the debate: whether the behaviour is caused by the will of the individual/under the control of the individual or caused by forces over which the person has no control.

Credit outline of internal and external forces. Accept references to biological, psychic and environmental determinism.

Accept explanations of free will as an 'illusion' particularly with reference to Skinner though this is not essential.

Credit description of relevant evidence up to one mark.

**AO2** Up to eight marks for analysis of the debate and the topics which are discussed.

Better candidates may discuss the implications of the causes of behaviour for moral responsibility and for psychology as a science. Accept discussion points on the problem with free will 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 other debates such as reductionism v. holism.

Credit use of relevant evidence.

**Maximum 8 marks if there is 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 debate. Discussion is full and includes thoughtful analysis. Most 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 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 debate. Discussion is evident and the answer is mostly focused on the question although there may be some irrelevance and / or misunderstanding. At the top of the band references to at least one topic area are apparent though these are perhaps not linked so clearly to the discussion as for the top 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.

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

Answer shows some knowledge and understanding of the 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

### Topic: Methods in Psychology

#### Question 12

[AO3 = 2 marks]

**AO3** One mark for reference to the medians: participants in Group B/those who heard the story about the boy being involved in an accident/made anxious, gained a higher memory recall score than those in Group A/the control group or similar; medians suggest that anxiety does appear to improve recall of information from memory though not by very much; although slightly different, the medians do not suggest a huge difference in performance.

One mark for reference to the ranges: the scores in B were more spread out than those in A; ranges suggest that the manipulation of anxiety affects people differentially.

Do not credit verbal description of the results.

#### Question 13

[AO3 = 2 marks]

**AO3** Two marks for an explanation.  
One mark for any of the following: the data are not at interval level; rated so best treated as ordinal data.  
One mark for an expansion such as; a rating scale is too imprecise to make mathematical operations permissible; the numerical data not considered as values on a safe scale where intervals are equal.  
Allow one mark max for alternative explanations eg better able to deal with extreme values/outliers; the mode is not as sensitive as the median.

#### Question 14

[AO3 = 2 marks]

**AO3** One mark for general reason for random allocation covering points such as to try to ensure that participant variables are spread evenly across the two groups; failure to randomly allocate could introduce a confounding variable whereby the cause of any differences between the two groups could be due to some uncontrolled participant factor rather than the IV  
Second mark for link to this study for example individual differences in memory evened out across the two groups.  
Credit other relevant points such as researcher bias.

**Question 15**

**[AO3 = 1 mark]**

**AO3** One mark for an accurate definition: a test or measuring device is measuring what was intended or what it is supposed to be measuring.

**Question 16**

**[AO3 = 2 marks]**

**AO3** Up to two marks for a full explanation.

Explanation may include the following points: no check was made as to whether or not the story was in fact anxiety-inducing; no measurement of anxiety; the difference between the scores could have been because of some other reason such as: the participants in Group B may have had higher recall scores because the story was more interesting; the story involving the boy being hit by a car may have been more meaningful especially as the participants were hospital employees; the participants in Group A may have found their story dull/non-distinctive.

One mark for an incomplete or muddled answer.

**Question 17**

**[AO3 = 2 marks]**

**AO3** Up to two marks for the suggestion: some kind of check with the participants after they had heard the story; trialing the stories and asking people to rate the stories for fear content; reporting on their anxiety levels such as a questionnaire; a physiological measure testing for increased arousal; comparing the control group with the experimental group.

One mark for an incomplete or muddled answer.

**Question 18**

**[AO3 = 3 marks]**

**AO3** Accept the original BPS ethical guidelines and the more recent ethical guidelines based on respect, competence, responsibility and integrity.

One mark for identifying the issue. Answers will probably deal with protection from harm and deception though candidates might make a case for confidentiality, informed consent and right to withdraw.

Up to two marks for explaining how the issue applies to the study eg anxiety was induced in participants – this was the variable that was manipulated. This carries with it responsibility for the participants well-being during and at the end of the study.

One mark for a vague or incomplete explanation.

### Question 19

[AO3 = 6 marks]

**AO3** Candidates should argue for a two-tailed test as there is no suggestion of direction in the stem. However accept one-tailed if the candidate makes a case for it.

The data generated could be accepted as interval or better treated at the ordinal level. The design is independent, so appropriate tests of significance would be the independent *t* test or Mann-Whitney. The choice should be justified.

The most likely level of significance suggested is the 5% level but whatever the decision, this should be justified.

The candidate should convey how they would determine whether or not the result of statistical test is significant ie the obtained statistical value from the test should be compared with the critical values in the appropriate statistical table. This will determine whether or not the result is significant and whether or not the alternative hypothesis can be accepted.

### Mark Bands

**5 - 6 marks** All points appropriately addressed and mostly well justified. There is little/no misunderstanding.

**3 - 4 marks** Two or three points are appropriately addressed and there is some sensible justification. There may be some misunderstanding in parts.

**1 – 2 marks** At least one point appropriately addressed and justified  
or  
1 or more points addressed but without justification.

**0 marks** **No relevant content**