AQA

ASSESSMENT and
QUALIFICATIONS
ALLIANCE

General Certificate of Education

Psychology (5186/6186)
Specification B

PYB1 Introducing Psychology

Mark Scheme

2006 examination – January 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.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of candidates' 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.

PYB1

Quality of Written Communication

Candidates are required to:

- select and use a form and style of writing appropriate to purpose and to complex subject matter;
- organise relevant information clearly and coherently, using specialist vocabulary where appropriate;
- ensure spelling, grammar and punctuation are accurate, so that meaning is clear.

The assessment criteria for quality of written communication apply only to questions with 10 marks in AS unit test questions. The following criteria should be applied in conjunction with the question mark scheme.

The bands for quality of written communication must be regarded as part of the mark scheme even though they are listed separately. If a candidate's quality of written communication fails to meet the achieved content band, then s/he will lose one mark.

Band 1: Good quality of written communication

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

Band 2: Average quality of written communication

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

Band 3: Poor quality of written communication

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 and often obscure meaning.

Note: The main body of the answer should be assessed for Quality of Written Communication. Neither a sketched plan at the start of an answer, nor a list of points at the end of an answer where a candidate has clearly run out of time, should be assessed for quality of written communication.

SECTION A: APPROACHES

1   **Total for this question: 20 marks**

(a)   Outline **one** way in which Skinner influenced the development of psychology.   *(2 marks)*

[AO1 = 2, AO2 = 0]

AO1   One mark for identification of a relevant influence but brief or slightly muddled account. Two marks for identification and elaboration of the influence.

Likely answers: scientific nature of the approach; theoretical contribution; practical applications in therapy; importance of learning from the environment; influence on education; comparative psychology.

(b)   Outline **two** criticisms of the psychodynamic approach.   *(4 marks)*

[AO1 = 2, AO2 = 2]

AO1   One mark for each criticism identified.

Likely answers: unscientific; deterministic; too much emphasis on innate biological forces.

AO2   One mark for elaboration of each criticism identified. This may be in the form of justification/ illustration/counter-criticism.

(c)   Lesley is anxious and has low self-esteem. As a child, she felt that, no matter how hard she tried to please people, no one ever approved of her. She sometimes feels worthless.

Referring to the humanistic approach, explain **one** possible cause of Lesley's problems.
(4 marks)

[AO1 = 2, AO2 = 2]

AO1   Up to 2 marks for description of one cause, eg unconditional positive regard; Maslow's hierarchy of needs; congruence – incongruence; conditions of worth.

AO2   Up to two marks for reference to the stimulus material which illustrates the identified features.

(d) Psychology has been defined as the scientific study of behaviour and experience. Describe and discuss how psychologists study behaviour and experience scientifically. *(10 marks)*

[AO1 = 5, AO2 = 5]

AO1 Up to five marks for description in detail of how psychologists study behaviour and experience scientifically, eg experiments – variables are isolated to be measured. This is done in a carefully controlled way to see what effect one variable has on the other. Candidates may focus on other ways in which psychologists study behaviour and experience scientifically such as the systematic approach used, hypothesis testing, sampling, generalisations, etc. Candidates may focus on how psychologists adopt a positivist approach – behaviour can be objectively observed and studied, empiricism – the unbiased and objective collection of data. Credit up to 2 marks for description of relevant evidence and/or studies.

AO2 Up to five marks for discussion. Not all research that is carried out in psychology is scientific, eg case studies, diary methods, unstructured interviews. Here, a high level of validity is sought. Qualitative data is gathered which may be subjective. One does not necessarily achieve depth of information by isolating and controlling variables for study. Candidates may also receive credit for comparisons between science and common sense. Alternatively, candidates may focus on the key approaches in psychology, eg psychology does not always attempt to generalise from some human behaviour to all human behaviour, ie the humanistic approach. Credit up to 2 marks for the use of relevant evidence and/or studies.

Mark bands

8 – 10 marks   **Good answers**
The candidate will have accurately described how psychologists study behaviour and experience scientifically. The candidate will have thoroughly discussed these features with accuracy. The answer is mostly relevant with little misunderstanding.

4 – 7 marks   **Average answers**
At the top of the band, the candidate will have described how psychologists study behaviour and experience scientifically though lacking in detail. Limited discussion will be evident. For 6/7 marks, there must be some discussion. There may be some inaccuracy and/or irrelevance. At the bottom of the band, the candidate will be largely descriptive. Discussion may be little more than a comment.

1 – 3 marks   **Poor answers**
The candidate demonstrates a basic understanding of how psychologists study behaviour and experience scientifically. The response is likely to be poorly focused.

Total AO1 marks for Question 1: 11
Total AO2 marks for Question 1: 9
Total marks for Question 1: 20

2   **Total marks for question: 20 marks**

(a) Below is a diagram of the human brain. It is labelled **A**, **B**, **C** and **D**. Write in your answer book which letter **A**, **B**, **C** or **D** matches each of the areas below:

  (i)   auditory area;
  (ii)   somatosensory area;
  (iii) visual area;
  (iv)   motor area.   *(4 marks)*

[4 marks: AO1 = 4, AO2 = 0]

AO1   (i)   C
                (ii)   B
                (iii) D
                (iv)   A

(b) Distinguish between the terms *genotype* and *phenotype*.   *(3 marks)*

[AO1 = 2, AO2 = 1]

AO1   One mark for correct definition of each term.

Genotype refers to a person's genetic make-up (AO1, 1).
Phenotype refers to a person's characteristics that are determined by genetics and the environment (AO1, 1).

AO2   One mark for any appropriate distinction between these terms, eg genotype is fixed whereas phenotype is malleable. Credit reference to examples such as PKU.

(c) State what is meant by *selective breeding*. Explain why it has been used by psychologists to investigate the genetic basis of behaviour.   *(3 marks)*

[AO1 = 1, AO2 = 2]

AO1   One mark for the correct definition of the term.

Selective breeding refers to the artificial selection of male and female animals that are put together to breed and produce offspring (AO1, 1).

AO2   Two marks for explanation, eg to observe whether a trait or characteristic continues over successive generations (AO2, 1). If a trait continues over successive generations, then there is a genetic basis. If a trait does not continue over successive generations, then a genetic basis may be ruled out (AO2, 1).

(d) Discuss how knowledge of evolution has contributed to our understanding of behaviour. Illustrate your answer with examples. *(10 marks)*

[AO1 = 4, AO2 = 6]

AO1 For four marks, candidates should identify how knowledge of evolution has contributed to our understanding of behaviour. Examples could include: sexual selection, attachment, parental investment, language, individual differences, comparison of human behaviour to other species, etc. Candidates can only earn up to two marks if they merely present knowledge of evolution without linking it specifically to the contribution(s), eg natural selection – individuals who are best adapted to their environment are fittest. Individuals who are fittest are most likely to survive and reproduce. However, if candidates expand upon natural selection in terms of how adaptive characteristics are then passed on to future generations whilst maladaptive ones die out, then this can be credited as a contribution and so gain more than two marks. Credit up to 1 mark for description of relevant evidence and/or studies.

AO2 Candidates will discuss how knowledge of evolution has contributed to our understanding of behaviour. Candidates may focus on the criticisms of evolutionary research, eg much of the empirical evidence is from natural experiments. Although the validity of the theory is demonstrated through observation, cause and effect cannot be established as there are no manipulations of variables. Candidates may illustrate the contributions made by reference to research studies, eg Kagan (1994) who suggested that temperament may be a product of evolution. Geary (1995) argues that mathematical skills are innate and a result from evolution based on the research of one-week-old babies. Barkow et al (1992) argues that primate behaviour such as exploration of the environment is innate. Lorenz (1958) argued that when individual members of the same species all exhibit the same behaviour, that behaviour must be largely inherited. Credit reference to non-human examples. Credit up to 1 mark for the use of relevant evidence and/or studies.

Maximum 6 marks if no reference to examples

Mark bands

8 – 10 marks   **Good answers**
The candidate will have accurately displayed knowledge of the contributions of evolution to our understanding of behaviour. Discussion will be evident throughout the answer and with reference to examples. The answer is mostly relevant with little misunderstanding.

4 – 7 marks   **Average answers**
At the top of the band, the candidate will have described the contributions of evolution to our understanding of behaviour though lacking in detail. Limited discussion will be evident. There must be some discussion for 6 marks. There may be brief reference to examples in the response. There may be some inaccuracy and/or irrelevance.

At the bottom of the band, the candidate will be largely descriptive. Discussion and/or example(s) may be little more than a comment.

1 – 3 marks   **Poor answers**
The candidate demonstrates some limited understanding of the contribution(s) of evolution and may be largely descriptive in their response. The response is likely to be poorly focused.

Total AO1 marks for Question 2: 11
Total AO2 marks for Question 2: 9
Total marks for Question 2: 20

SECTION B: RESEARCH METHODS

3   **Total for this question: 20 marks**
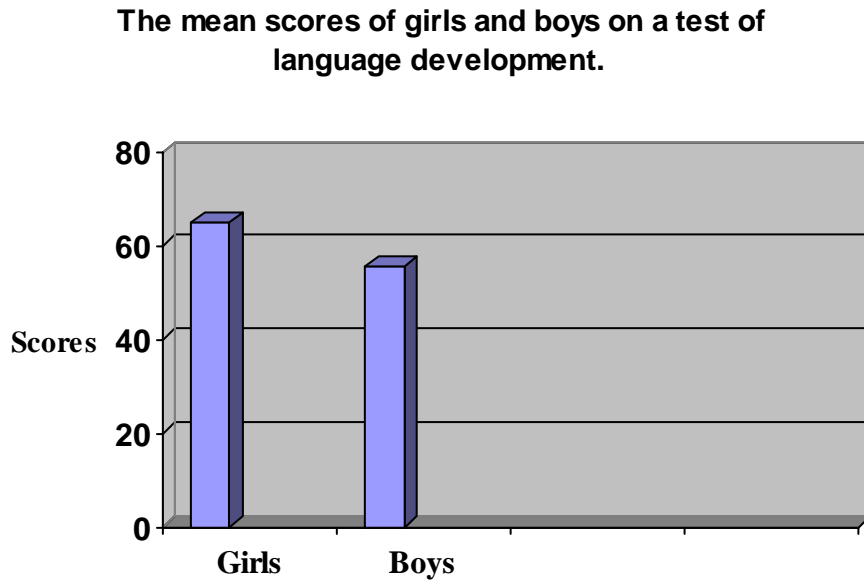
(a)   In your answer book, sketch a bar chart of the **mean** scores presented in **Table 1**.   Provide a
       suitable title and correctly label your bar chart.   *(3 marks)*

[AO1 = 0, AO2 = 3]

Diagram 1

**The mean scores of girls and boys on a test of
language development.**

To gain the maximum three marks, candidates must provide the following:

- A title for the bar chart
- Accuracy of bars on the bar chart
- Appropriate axes and labelled.

(b)   What do the mean scores indicate about language development in these girls and boys?
       Justify your answer.   *(2 marks)*

[AO1 = 0, AO2 = 2]

AO2   Girls performed better on this test of language development than boys (AO2, 1). The mean is
          higher (64.9) for girls compared to (55.5) for boys (AO2, 1).

(c) (i) Outline what is meant by the term *standard deviation*. *(2 marks)*

[AO1 = 2, A02 = 0]

AO1 Two marks for correct outline of the term.

Standard deviation is a measure of the variation in a set of scores (AO1, 1). It provides an idea of how spread-out a set of scores is around the mean value (AO1, 1).

(ii) What do the standard deviations indicate about the language development of these girls and boys? Justify your answer. *(2 marks)*

[AO1 = 0, AO2 = 2]

AO2 The standard deviation for girls (18.0) is higher than boys (15.5) (AO2, 1), indicating a greater spread of scores round the mean for girls than boys (AO2, 1).

(d) Before the investigation, the psychologist conducted a pilot study.

State what is meant by a *pilot study*. *(1 mark)*

[AO1 = 1, AO2 = 0]

AO1 One mark for correct definition of the term.

A pilot study is an initial run-through of the procedures to be used in an investigation (AO1, 1).

(e) The psychologist used a random sampling technique to select the children for this study.

State **one** advantage and **one** disadvantage of random sampling. *(2 marks)*

[AO1 = 2, AO2 = 0]

AO1 One mark for the identification of the advantage, eg findings can be generalised; lacks bias in selection of participants; every person in the target population has an equal chance of being selected.

One mark for the identification of the disadvantage, eg can be difficult to conduct a true random sample in terms of expense and time; the sample may not be truly representative demographically to the target population.

(f) Outline and explain **one** ethical issue that should have been considered when this study was being conducted. *(4 marks)*

[AO1 = 2, AO2 = 2]

AO1 One mark for identification of a relevant ethical issue, eg consent (AO1, 1). One further mark for an outline of the issue raised, eg because the children in this investigation were under 16 years old (AO1, 1).

AO2 Two marks for explanation of the ethical issue, eg expansion or solution to ethical issue: consent may be sought from the children's parents/headteacher/loco parentis (AO2, 1) in the form of a signed letter of agreement (AO2, 1).

(g) The psychologist decided to conduct an unstructured interview with one child who achieved a high score on the language test.

State **one** strength and **one** limitation of an unstructured interview. *(2 marks)*

[AO1 = 2, AO2 = 0]

AO1 One mark for the identification of the strength, eg participant can expand on areas they see as important; gives rich and in-depth information; interviewer can explore emerging issues.

One mark for the identification of the limitation, eg objectivity is difficult to achieve; difficult to analyse the data; not generalisable.

(h) Following the investigation, the psychologist conducted a non-participant observation at the primary school.

Outline what is meant by *non-participant observation*. *(2 marks)*

[AO1 = 2, AO2 = 0]

AO1 Two marks for correct outline of the term, eg non-participant observation is where the researcher dissociates him/herself from the group being observed; the researcher does not intrude into the situation being observed; observes from a distance; if covert should have no effect on the behaviour being observed.

Total AO1 marks for Question 3: 11
Total AO2 marks for Question 3: 9
Total marks for Question 3: 20

SECTION C: PSYCHOLOGY OF GENDER

4   **Total for this question: 20 marks**

(a) Identify and briefly describe **one** reason for conducting cross-cultural research.   *(3 marks)*

[AO1 = 3, AO2 = 0]

AO1   One mark for identification of a relevant reason.
Two marks for description of the reason but brief or slightly muddled account.
Three marks for clear identification and elaboration of the reason.

Possible answer: Cross-cultural research is useful for investigating the nature/nurture debate (AO1, 1). If behaviour is found to be similar across different cultures, then these characteristics must be genetically determined (AO1, 1). However, if behaviour is found to be different, then characteristics are suggested to be due to the environment (AO1, 1).

(b) Using an example, explain what is meant by *androgyny*.   *(3 marks)*

[AO1 = 2, AO1 = 1]

AO1   One mark for definition of the term but brief or slightly muddled account.
Two marks for definition and elaboration of the term.

Androgyny is used to describe an individual who possesses a balance of masculine and feminine traits/attitudes/behaviours.

AO2   One mark for any relevant example, eg a man may be forceful within his work-role, but also empathic and caring as a father (AO2, 1).

(c) Amelia was watching a medical drama on television. It showed a female nurse saving a patient's life. Amelia said to her mummy, "I am a girl. When I grow up, I want to be a nurse like the lady on the television."

Outline what is meant by the terms *gender role* and *gender identity*. For each term, refer to the example of Amelia.   *(4 marks)*

[AO1 = 2, AO2 = 2]

AO1   One mark each for correct definition of the terms.

Possible answer: Role refers to a part which a person might expect to play in a given situation (AO1, 1).
Identity refers to the sense that someone has of what kind of person they are (AO1, 1).

AO2   Two marks for reference to the stimulus material which illustrates the terms. Role refers to Amelia stating to her mummy that she would like to be a nurse/lady on the television when she grows up (AO2, 1). Identity refers to Amelia stating that she is a girl (AO2, 1).

(d) Describe and discuss methodological **and/or** ethical issues which might arise when using case studies to investigate gender. Refer to **at least one** case study in your answer.   *(10 marks)*

[AO1 = 5, AO2 = 5]

AO1 Up to 5 marks for description of issues which might arise when using the case study method to investigate gender differences. Candidates may choose to focus on methodological issues, eg case studies usually involve the recall of earlier information and are therefore unreliable. Cause and effect are difficult to establish. Case studies use a limited sample and therefore lack generalisability. Alternatively, candidates may focus on ethical issues, eg confidentiality and privacy must be protected – individuals should not be named.

AO2 The issues should be discussed with explicit reference to gender, eg case studies are particularly useful when behaviour is rare. (Up to 2 marks for description of gender case studies.) It provides great insights from an unusual perspective, eg Money and Erhardt (1972) – showed how gender reassignment was possible and that gender is socially rather than biologically constructed. Candidates may also refer to the case study described by Goldwyn (1979) of Daphne Went who had testicular feminising syndrome. The case again provided a useful insight showing how Daphne Went was content with her female role. Candidates may discuss how case studies give an in-depth picture producing rich, qualitative data, eg Imperato-McGinley (1974) – the case study of the Batista boys.

Maximum 6 marks if no reference to a case study
Maximum 6 marks if only one issue presented

Mark bands

8 – 10 marks **Good answers**
The candidate will have accurately described methodological and/or ethical issues which might arise when using case studies to investigate gender. Discussion of the issues with reference to at least one gender study is accurately presented throughout the response and with focus on the question. The answer is mostly relevant with little misunderstanding.

4 – 7 marks **Average answers**
The candidate correctly describes methodological and/or ethical issues relevant to case studies. At the top of the band, discussion of the issues will be present albeit limited. For 7 marks, there must be reference to more than one issue with some discussion present in the response. There is reference to at least one gender study. The response may be slightly inaccurate and/or irrelevant.

At the bottom of the band, the candidate should describe a methodological and/or ethical issue in relation to case studies. There is some reference to gender, but the response lacks relevance in relation to the issue. Discussion may be little more than a comment. At the bottom of the band, there may be no reference to a study.

1 – 3 marks **Poor answers**
The candidate may have referred to a methodological and/or ethical issue but there are inaccuracies in the explanation. No specific relation to gender is present in the response. The response is likely to be poorly focused.

Total AO1 marks for Question 4: 12
Total AO2 marks for Question 4: 8
Total marks for Question 4: 20

5   **Total for this question: 20 marks**

(a)   Outline Freud's explanation of the *Oedipus complex*.   *(3 marks)*

[AO1 = 3, AO2 = 0]

AO1   Three marks for correct description including three of the following features: phallic stage in boys, sexual attraction to opposite sex parent, castration anxiety, unconscious conflict and resolution, identification, etc.

(b)   A group of students have a disagreement about which of the three definitions below can be applied to the terms *modelling* and *reinforcement*:

- a person's desire to be like another person or to be part of a particular social group;
- the process by which a response is strengthened;
- a procedure whereby a person observes another person and then attempts to imitate his or her behaviour.

In your answer book, write down the definition which illustrates each of the following:

(i)   modelling;
(ii)   reinforcement.   *(2 marks)*

[AO1 = 0, AO2 = 2]

AO2   (i)   A procedure whereby a person observes another person and then attempts to imitate his or her behaviour.

(ii)   The process by which a response is strengthened.

(c)   Describe **one** study in which the cognitive developmental theory of gender was investigated. Indicate in your answer why the study was conducted, the method used, the results obtained and the conclusion drawn.   *(5 marks)*

[AO1 = 5 , AO2 = 0]

AO1   Any appropriate study in which the cognitive developmental theory of gender development was investigated, eg Damon (1977), Thomson (1975), Martin and Halverson (1983).

One mark – why the study was conducted (must go beyond the stem)
One mark – information about the method
One mark – identification of the results
One mark – indication of the conclusion drawn
One mark – additional descriptive detail, eg detailed methodology (or credit evaluative point as long as it provides additional descriptive information).

(d)   Discuss biological explanations of gender development. Refer to **at least one** study in your
answer.   *(10 marks)*

[AO1 = 4, AO2 = 6]

AO1   Up to 4 marks for a description of biological explanations of gender development. Candidates
may focus on how genetic factors cause gender-appropriate behaviours – gender and sex are
interrelated. Differences between the sexes are due to anatomical differences. Candidates may
choose to focus on hormones that control many sexual behaviours such as ovulation. Alternatively,
candidates may focus on atypical sex chromosomes, eg Klinefelter's syndrome and the effect that
this has on gender development.

AO2   Candidates will discuss the acquisition of gender development presented in AO1. The response
will focus on supporting/conflicting evidence for the explanation presented. For example, cross-
cultural studies, eg Mead (1935) found that some behaviours were universal and therefore innately
determined. Money and Erhardt (1972) studied a group of girls with androgenital syndrome who
displayed tomboyish behaviour and male genitalia. (Up to 2 marks for description of relevant
gender studies.) Candidates may also focus on limitations of the evidence, eg sex and gender need
not correspond – biological explanations are insufficient on their own. Candidates may contrast
the biological explanation with other explanations, eg the social learning approach and the
psychoanalytic approach and evidence which supports these approaches.

Maximum 6 marks if no reference to a study

Mark bands

8 – 10 marks   **Good answers**
Candidates will have provided an accurate description of biological explanations of
gender development. The discussion is presented in detail and with reference to at least
one gender study. The answer is mostly relevant with little misunderstanding.

4 – 7 marks   **Average answers**
At the top of the band, candidates will have provided some understanding of biological
explanations of gender development. There will be discussion of the explanations and
reference to at least one study for 6 marks. There may be some inaccuracy and/or
irrelevance.

At the bottom of the band candidates will have presented largely descriptive answers.
There may be some discussion of biological explanations but this is little more than a
comment. The response may not focus heavily on explaining gender.

1 – 3 marks   **Poor answers**
Candidates will present a response that does not go beyond identifying and describing
biological explanations of gender development. The response is likely to be limited
and/or poorly focused.

Total AO1 marks for Question 5: 12
Total AO2 marks for Question 5: 8
Total marks for Question 5: 20

AS/A PSYCHOLOGY SPECIFICATION B

ASSESSMENT OBJECTIVE GRID – UNIT 1: INTRODUCING PSYCHOLOGY – JANUARY 2006

Question		Weighting for knowledge and understanding (AO1)		Weighting for analysis and application (AO2)		Total marks
		Marks	Percentage	Marks	Percentage	
Q1	(a)	2		0		
	(b)	2		2		
	(c)	2		2		
	(d)	5	55	5	45	20
Q2	(a)	4		0		
	(b)	2		1		
	(c)	1		2		
	(d)	4	55	6	45	20
Q3	(a)	0		3		
	(b)	0		2		
	(c) (i)	2		0		
	(ii)	0		2		
	(d)	1		0		
	(e)	2		0		
	(f)	2		2		
	(g)	2		0		
	(h)	2	55	0	45	20
Q4	(a)	3		0		
	(b)	2		1		
	(c)	2		2		
	(d)	5	60	5	40	20
Q5	(a)	3		0		
	(b)	0		2		
	(c)	5		0		
	(d)	4	60	6	40	20