

General Certificate of Education

Psychology 5186

Unit 1 (PYB1) Introducing Psychology

Mark Scheme

2008 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.

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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

(2 marks)

(a) Outline **one** way in which Rogers influenced the development of psychology.

[AO1 = 2, AO2 = 0]

AO1 One mark for identification of a relevant influence but may be brief or slightly muddled account.

Two marks for identification and clear elaboration of the influence.

Likely answers: emphasis on any of the following: person as an active agent, holism, self concept, client-centred therapy, self actualisation, importance of free will, idiographic approach.

(b) The table below (not shown here) shows some of the ideas that researchers have contributed to the development of psychology. State **one** contribution for (i), and give the names of the researchers for (ii) and (iii). Label your answers clearly. (3 marks)

[AO1 = 3, AO2 = 0]

AO1 One mark for an appropriate contribution. One mark each for correct name of researcher.

- (i) Likely answers: first psychological laboratory; introspection; structuralism; psychology as a scientific discipline
- (ii) Darwin
- (iii) Skinner

Credit appropriate names of researchers that are not listed on the specification.

(c) Mia is revising for her history examination. Her teacher asks her the following question, "Who was the mother of Queen Elizabeth I?" Mia thinks hard. She then remembers what her teacher taught her in the previous history lesson. She then replies, "Anne Boleyn".

Outline the information-processing approach and illustrate it with reference to the description above. (5 marks)

[AO1 = 2, AO2 = 3]

- **AO1** Up to two marks for reference to features of the information-processing approach, e.g. mental processing of information sensory input, decision making, storage processes, output, inputting of data from the environment, sequential processes, analogy to computers in terms of information processing, limited capacity. Credit may be given for a diagrammatic representation of the approach, although this is not required by the question.
- AO2 Up to three marks for reference to the stimulus material which illustrates the approach, for example Sensory input processes Mia hears/perceives/attends to the teacher asking the question. Storage processes thinking/remembering/organising the information. Output processes Mia answers the question. Credit reference to aspects of the revision process.

(d) Discuss the psychodynamic approach in psychology. (10 marks)

[AO1 = 4, AO2 = 6]

- AO1 Up to four marks for description of features of the psychodynamic approach. Features could include unconscious motivation, tripartite division of personality id, ego and superego, stages of development, therapeutic approaches, defence mechanisms, emotional drives of sex and aggression. Credit description of relevant evidence (one mark).
- **A02** Up to six marks for discussion, eg the psychodynamic approach places great emphasis on the unconscious mind in motivating behaviour but it cannot be measured in any precise way. Many assumptions are regarded as unscientific/lacking supporting evidence. Candidates may refer to the benefits/limitations of an idiographic approach. Candidates may contrast the approach with other approaches in psychology, eg the free will approach of humanistic psychology, which the psychodynamic approach does not recognise. Credit use of relevant evidence.

Mark Bands

8 – 10 marks Good answers

The answer shows accurate description and thorough discussion of the features of the psychodynamic approach. The answer is mostly relevant with little misunderstanding.

4 – 7 marks Average answers

At the top of the band, features of the psychodynamic approach are described though it may lack detail. Discussion will be evident. There may be some inaccuracy and/or irrelevance.

At the bottom of the band, the answer will be largely descriptive. Discussion may be little more than a comment.

1 – 3 marks Poor answers

The answer shows limited understanding of the psychodynamic approach. The answer is likely to be poorly focused.

Total A01 marks for Question 1 = 11 Total A02 marks for Question 1 = 9 **Total marks for Question 1 = 20 marks**

2 Total for this question: 20 marks

(a) Outline the role of the adrenal glands in the fight or flight response. (2 marks)

[AO1 = 2, AO2 = 0]

AO1 One mark for identification of the role of the adrenal glands. Two marks for identification and elaboration of the role of the adrenal glands.

Possible answer: The adrenal glands are stimulated to release adrenaline (AO1, 1). This prepares the body for action in a stressful situation (AO1, 1).

(b) Tom has a phobia of mice. He saw a mouse scurry across the floor. Tom immediately felt sick and he felt the hairs on the back of his neck stand on end. Some time later, his heart stopped pounding and he got his breath back.

From the description above, identify **three** of Tom's bodily responses and state whether **each** response results from the action of the sympathetic or parasympathetic division of the autonomic nervous system. (3 marks)

[AO1 = 0, AO2 = 3]

- **AO2** One mark (up to three) for any of the following:
 - 'Tom immediately felt sick' sympathetic division of the ANS
 - '...he felt the hairs on the back of his neck stand on end' sympathetic division of the ANS
 - ...his heart stopped pounding' parasympathetic division of the ANS
 - '...he got his breath back' parasympathetic division of the ANS.
- (c) Describe **one** study in which selective breeding was used to investigate the genetic basis of behaviour. Indicate in your answer why the study was conducted, the method used, results obtained and conclusion drawn.
 (5 marks)

[AO1 = 5, AO2 = 0]

AO1 Any appropriate study in which selective breeding was used to investigate the genetic basis of behaviour, eg Tryon (1940).

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 **at least two** methods that have been used to investigate localisation of function (cortical specialisation) in the brain. (10 marks)

[AO1 = 4, AO2 = 6]

- AO1 Up to four marks for a description of the methods of investigating localisation of function in the brain. Examples may include EEGs: shows patterns of brain waves. Scans: PET assesses metabolic activity in different parts of the brain. CAT shows horizontal sections of the brain. MRI gives a clear and detailed picture of brain structures. Electrical stimulation a weak current is applied to a small region of the brain. Neurosurgery, eg lesions cutting connections in the brain. Post-mortem studies of people with known deficits. Credit description of relevant evidence and/or studies (one mark).
- **A02** Candidates will discuss how these methods have been used to investigate localisation of function in the brain. For example, with neurosurgery, candidates may discuss the accuracy of this technique; however, the use of expensive equipment and the invasive exposure of the brain may be questioned. Candidates may choose to discuss issues involved with this type of method conclusions drawn from surgery on animals may not always generalise to humans. The use of EEGs has enabled the detection of electrical activity in specific parts of the brain via a non-invasive procedure. PET scans, for example, have been used to investigate brain injuries and associated behavioural changes. However, this method of scanning is expensive and involves the ethical issue of injecting radioactive glucose into the bloodstream of patients. Credit use of relevant evidence and/or studies.

Maximum 6 marks if only one method identified

Mark bands

8 – 10 marks Good answers

The answer shows knowledge of at least two methods used to investigate localisation of function in the brain. Discussion of these methods will be evident throughout the answer. The answer is mostly relevant with little misunderstanding.

4 – 7 marks Average answers

At the top of the band, the answer refers to two methods used to investigate localisation of function. Discussion of these methods will be evident. There may be some inaccuracy and/or irrelevance.

At the bottom of the band, the answer may refer to only one method of investigation and/or portray largely descriptive answers. Discussion may be present, albeit limited.

1 – 3 marks Poor answers

The answer shows limited understanding of a method used to investigate localisation of function. The response is largely descriptive and may lack focus on the question.

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

SECTION B: RESEARCH METHODS

Total for this question: 20 marks

(a) Identify the type of correlation shown in **Figure 1** and state what it shows about the relationship between fat consumption and GCSE results. (2 marks)

[AO1 = 1, AO2 = 1]

3

- **AO1** One mark for type of correlation shown a negative correlation.
- **AO2** One mark for the interpretation of data, eg the more fat that pupils consumed in their diets, the lower their average GCSE points score.

Credit appropriate alternative answers.

(b) Explain the difference between an experiment and a correlational study. (4 marks)

[AO1 = 2, AO2 = 2]

- **AO1** One mark each for correct reference to a feature of the experimental method and correlational design.
- **AO2** Two marks for explanation of the difference identified in AO1.

Possible answer: An experiment tests the effect which an IV has upon a DV (AO1, 1), whereas a correlation looks for a relationship between two variables (AO1, 1). Therefore, an experiment can establish cause and effect (AO2, 1) but a correlation can only predict the relation between variables (AO2, 1).

Credit appropriate alternative answers, eg control versus no control; manipulation versus no manipulation; relationship versus no relationship.

(c) A newspaper report claimed that the study showed a relationship between fat consumption and GCSE results.

Suggest **one other** possible explanation for the relationship shown in the scattergram (**Figure 1**). Justify your answer. (2 marks)

[AO1 = 0, AO2 = 2]

AO2 One mark for an appropriate explanation e.g. a third variable/another variable (named or unnamed), eg socio-economic status.

One mark for justification of the explanation suggested, eg a pupil's low socio-economic status could have accounted for the fat consumption and the GCSE results.

Credit any variable that could explain the negative relationship (high fat consumption and poor GCSE results).

- (d) The psychologist selected the pupils for this study by stratified sampling.
 - (i) Describe how a stratified sample might be obtained.

(3 marks)

[AO1 = 3, AO2 = 0]

AO1 One mark: the researcher identifies the different strata or sub-groups (from the target population).

One mark: the researcher selects participants in the proportions in which they are represented in the population.

One mark: the researcher eg randomly selects participants within each strata or subgroup.

(ii)	State one strength and one limitation of stratified sampling.	(2 marks)
(11)	otate one strength and one initiation of stratifica sampling.	(2 marks)

[AO1 =2, AO2 = 0]

AO1 One mark for an appropriate strength, eg the sample is representative of the target population; random sample - avoids systematic biases in the sample; findings can be generalised.

One mark for an appropriate limitation, eg can be difficult to identify the strata from which to select participants; can be time consuming to gather participants.

(e) The psychologist carried out a participant observation, rather than a non-participant observation, of the pupils' behaviour in the classroom.

State **one** advantage and **one** disadvantage of participant observation. (2 marks)

[AO1 = 2, AO2 = 0]

AO1 One mark for identification of the advantage, eg researcher understands context in which behaviour is taking place, high in ecological validity.

One mark for identification of the disadvantage, eg researcher becomes too involved with the group and loses objectivity, difficult to record behaviour promptly, bias on the part of the researcher, the researcher might affect behaviour/outcome.

- (f) The psychologist interviewed PE teachers at the school in order to assess pupils' attitudes towards exercise.
 - (i) Write **one** open question that might be used to obtain information about a pupil's attitude towards exercise. (1 mark)

[AO1 = 0, AO2 = 1]

AO2 One mark for an appropriate example of an open question.

Possible answer: Why do you think Jack finds exercise boring?

(ii) Write **one** closed question that might be used to obtain information about a pupil's attitude towards exercise. (1 mark)

[AO1 = 0, AO2 = 1]

AO2 One mark for an appropriate example of a closed question.

Possible answer: Does Sally always refuse to participate in the P.E lesson? (Yes/No)

(g) Identify and explain **one** ethical issue that the psychologist should have considered in this study. (3 marks)

[AO1 = 1, AO2 = 2]

AO1 One mark for identification of an appropriate ethical issue, eg consent, protection of participants, confidentiality, right to withdraw.

Credit old or revised ethical issues (BPS) eg respect, integrity etc.

AO2 Two marks for explanation of the ethical issue identified in AO1 in relation to this study.

Possible answer: Consent (AO1, 1). The children in this study are under 16 years of age (AO2, 1) therefore parental consent is needed (AO2, 1).

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) Using an example, state what is meant by the term sex role. (2 marks)

[AO1 = 1, AO2 = 1]

AO1 One mark for the correct identification of the term.

Possible answer: Sex role refers to a part which males and females might expect to play in a given situation (AO1, 1).

AO2 One mark for an appropriate example.

Possible answer: An example of a male sex role is head of the family (AO2, 1).

(b) (i) With reference to the study of gender, briefly explain **one** ethical issue that might arise when conducting cross-cultural research. (2 marks)

[AO1 = 1, AO2 = 1]

- **AO1** One mark for identification of a plausible ethical issue in relation to cross-cultural research.
- **AO2** One mark for explanation of the issue in relation to gender/cross-cultural research.

Likely answers: invasion of privacy, eg Mead; cultural bias, eg ethnocentrism on part of researcher/researcher uses own values in interpreting gender differences.

(ii) With reference to the study of gender, briefly explain **one** methodological issue that might arise when carrying out a case study. (2 marks)

[AO1 = 1, AO2 = 1]

- **AO1** One mark for identification of a plausible methodological issue in relation to the case study method.
- **AO2** One mark for explanation of the issue in relation to gender/case study method.

Likely answers: data largely qualitative, difficulties in terms of generalisation, eg Money – penectolmised twins.

(c) In relation to gender, describe what is meant by nature **and** nurture. (4 marks)

[AO1 = 4, AO2 = 0]

AO1 Two marks each for correct description of the terms in relation to gender.

Possible answer: Nature refers to the belief that gender differences in behaviour are innate (AO1, 1) and determined by genetic and biological factors (AO1, 1). Nurture refers to the idea that gender differences are learned (AO1, 1) and a result of social learning and cultural factors, i.e. the environment (AO1, 1).

Credit candidates who provide a good description of one term (up to three marks).

Credit evidence of candidates' knowledge of the debate.

Maximum 2 marks if no reference to gender.

(d) Describe and discuss **at least two** methodological and/or ethical issues which might arise when using the experimental method to investigate gender differences. Refer to research in your answer. (10 marks)

[AO1 = 5, AO2 = 5]

- A01 Up to five marks for a description of at least two issues. For example, the issue of quasi-experiments. Problems arise in drawing causal inferences when comparing naturally occurring groups, eg sex/gender cannot manipulate the IV. Therefore, animal research is undertaken, eg Diamond, and generalised to explain human behaviour. Candidates may choose to focus on other methodological issues, eg strength of control, reliability in the data, replicability or any other appropriate response. Candidates may raise ethical issues such as the focus on psychological well-being, the implications of exposure to stereotypical behaviour which may lead individuals to perceive themselves and/or others in a negative way. Credit up to two marks for description of relevant studies.
- **A02** The issues should be discussed with explicit reference to research into gender. Candidates may discuss the problem of exposure to stereotypical behaviour (Damon, 1977) or the issue of generalisability to 'real-life' (Kitto, 1989). Candidates may discuss methodological issues in relation to research, eg some studies use gender specific materials. Candidates who have raised ethical issues in AO1 may discuss how these ethical issues may be overcome with explicit reference to research, eg debriefing, the right to withdraw, consent may be sought from a child's parent or any other appropriate response. Credit use of relevant research.

Maximum 6 marks if only one issue presented Maximum 6 marks if no reference to gender research

Mark bands

8 – 10 marks Good answers

The answer correctly describes at least two methodological and/or ethical issues which might arise when using the experimental method to investigate gender differences. Discussion of the issues with reference to research is accurately presented throughout and with focus on the question. The answer is mostly relevant with little misunderstanding.

4 – 7 marks Average answers

At the top of the band, the answer shows correct description of at least two issues relevant to the experimental method. Discussion of the issues will be present albeit limited. For 7 marks, there is reference to research. There may be some inaccuracy and/or irrelevance.

At the bottom of the band, the answer may refer to one issue and/or is largely descriptive. There is some reference to gender, but the response lacks relevance in relation to the issue. Discussion may be little more than a comment.

1 – 3 marks **Poor answers**

The answer refers to an 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**

Total for this question: 20 marks Julia notices that her friend Ruth goes salsa dancing twice a week, so Julia starts going salsa dancing too. Julia carries on going to classes because everyone tells her that she is very good at dancing. From the description above, identify an example of the following:

(i) modelling;

(ii)	reinforcement.	(2 marks))
()			

[|AO1 = 0, AO2 = 2]

5

(a)

- **AO2** (i) Julia imitates Ruth's behaviour by going to salsa dancing classes.
 - (ii) Julia carries on going to classes because everyone tells her that she is very good at dancing.

(b) (i) Give a social learning theory explanation of identification. (1 mark
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[AO1 = 1, AO2 = 0]

AO1 One mark for correct explanation of the term.

Possible answer: Social learning theorists view identification as an attachment to specific models who possess qualities that an individual would like for themselves (AO1, 1).

(ii) Give a psychoanalytic explanation of identification. (1 mark)	(ii)	ii) Give a psychoanalytic explanation of identification.	(1 mark)
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[AO1 = 1, AO2 = 0]

AO1 One mark for correct explanation of the term.

Possible answer: Psychoanalytic theorists view identification as the process by which children gain their gender identity from their same-sex parents (AO1, 1).

Credit answers which refer to the Oedipus/Electra complex.

(i	iii)	State one difference between these two explanations.	(1 mark)	l
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[AO1 = 0, AO2 = 1]

AO2 One mark for an appropriate difference.

Possible answer: Psychoanalytic theorists state children identify with their same-sex parents, whereas social learning theorists state that children may have a number of models with whom they identify (AO2, 1).

Credit other appropriate answers/examples.

(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, results obtained and conclusion drawn.
 (5 marks)

[AO1 = 5, AO2 = 0]

AO1 Any appropriate study in which the cognitive-developmental theory of gender was investigated, eg Damon (1977), Thomson (1975), Martin and Halverson (1985).

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

[AO1 = 5, AO2 = 5]

- AO1 Up to five marks for 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. Alternatively, candidates may focus on atypical sex chromosomes, e.g. Turner's syndrome and the effect that this has on gender development. Credit up to two marks for description of relevant studies.
- **A02** Candidates should discuss the acquisition of gender development presented in AO1. The response may focus on supporting/conflicting evidence for the explanation presented. For example, cross-cultural studies, e.g. 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. Candidates may focus on general limitations of the biological explanation e.g. deterministic, nature versus nurture, reductionism, sex and gender need not correspond. Candidates may contrast the biological explanation with other explanations, e.g. the social learning approach and the psychoanalytic approach and evidence which supports these approaches. Credit use of relevant studies.

Maximum 6 marks if no reference to a gender study

Mark bands

8 – 10 marks **Good answers**

The answer shows an accurate description of biological explanations of gender development. 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, the answer shows some understanding of biological explanations of gender development. Discussion is evident and there is reference to at least one gender study for 7 marks. There may be some inaccuracy and/or irrelevance.

At the bottom of the band, answers may be largely descriptive. There may be some discussion but this is little more than a comment. The answer may not focus heavily on explaining gender.

1 – 3 marks **Poor answers**

The answer does not go beyond identifying and describing biological explanations of gender development. The response is likely to be 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 2008

Question		Weighting knowledg understar			for analysis ation (AO2)	Total marks	
			Marks	Percentage	Marks	Percentage	
Q1	(a) (b) (c) (d)		2 3 2 4	55	0 0 3 6	45	20
Q2	(a) (b) (c) (d)		2 0 5 4	55	0 3 0 6	45	20
Q3	(a) (b) (c) (d) (e) (f) (g)	(i) (ii) (i) (ii)	1 2 0 3 2 2 0 0 1	55	1 2 0 0 0 1 1 2	45	20
Q4	(a) (b) (c) (d)	(i) (ii)	1 1 4 5	60	1 1 0 5	40	20
Q5	(a) (b) (c) (d)	(i) (ii) (iii)	0 1 1 0 5 5 5	60	2 0 1 0 5	40	20