



ASSESSMENT and
QUALIFICATIONS
ALLIANCE

Mark scheme January 2004

GCE

Psychology B

Unit PYB1

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Quality of Written Communication

Where candidates are required to produce extended written material in English, the scheme of assessment must make explicit reference to the assessment of the quality of written communication. Candidates must be required to:

- select and use a form and style of writing appropriate to purpose and complex subject matter;
- organise relevant information clearly and coherently, using specialist vocabulary when appropriate;
- and
- ensure text is legible, and 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, ie part (d) in AS unit test questions. The following criteria should be applied in conjunction with the mark scheme.

The award of marks within a particular mark band can be achieved only if the criteria for the mark scheme and quality of written communication bands have been met.

The quality of written communication bands must be regarded as part of the appropriate mark scheme band even though they are listed separately in the mark scheme. If a candidate satisfies only part of the criteria, for either the mark scheme or the quality of written communication, then s/he cannot be awarded marks in that band. The next lower band must then be considered.

General Approach

Apply the principles below *only* to questions which require a banded mark scheme according to ‘Guidelines for Mark Schemes’. This means questions worth ten marks or more.

Band 1	Good quality of written communication	The candidate will express complex psychological ideas clearly and fluently, with well-linked sentences and paragraphs using appropriate psychological terminology. Presentation of psychological concepts and arguments will be relevant and well-structured. There will be few, if any, errors of grammar, punctuation and spelling.
Band 2	Average quality of written communication	The candidate will express complex psychological ideas clearly if not always fluently. Some limited but not consistent use of psychological terminology. Sentences and paragraphs reasonably well connected. Presentation of psychological concepts and arguments may sometimes be less relevant and poorly structured. Some errors of grammar, punctuation and spelling.
Band 3	Poor quality of written communication	The candidate will express simple psychological ideas clearly but be imprecise with more complex ideas. Sentences and paragraphs may not be connected and may be disjointed. Use of mainly non-specialist terms with only occasional psychological terminology. Presentation of psychological concepts and arguments may be of doubtful relevance or obscure. Errors of grammar, punctuation and spelling will be present and obtrusive.

SECTION A: APPROACHES**1****Total for this question: 20 marks**

- (a) A class of psychology students was discussing the findings of a study described to them by their teacher. The study showed that boys engaged in rough and tumble play more than girls. One student in the class commented, "But I knew that already. That's common sense, isn't it?"

Outline **one** reason the teacher could give the student to show that psychology is scientific and not just common sense. (3 marks)

[3 marks : AO1 = 3, AO2 = 0]

- AO1** One mark for basic outline of the reason identified.
Two marks for outline of the reason but correct terminology is mostly absent.
Three marks for full outline of the reason identified with appropriate terminology.

Examples: Psychology is scientific due to the use of measurement, experiments, empirical approach, based on theories, objectivity (AO1). An expansion on objectivity could be the use of laboratory experiments which are much more likely to produce reliable evidence (AO1) than subjective examples such as beliefs/opinions or personal anecdotes (AO1).

- (b) Explain **one** way in which Rogers influenced the development of psychology. (3 marks)

[3 marks : AO1 = 1, AO2 = 2]

- AO1** One mark for identification of a relevant influence.
- AO2** One mark for further explanation of this influence, one mark for explaining how this influenced psychology.

Examples: Viewing the person as active, being able to change and determine their own development (AO1, 1). The individual is therefore responsible for his or her own actions (AO2, 1). This influenced psychology by promoting the idea of personal responsibility (AO2, 1).

Credit may be given for emphasis on self/holism/client-centred therapy/self actualisation/importance of free will/idiographic approach.

- (c) Referring to features of the behaviourist approach, suggest why Harry has developed a fear of school. (4 marks)

[4 marks : AO1 = 2, AO2 = 2]

AO1 Candidates may choose to answer with general reference to the behaviourist approach, or specific reference to classical conditioning.

Up to two marks for reference to features of the behaviourist approach eg, behaviour is learnt, behaviour is conditioned, learning by association, learning of new responses to stimuli, principles of classical conditioning. The concept of reinforcement may be accepted if applied correctly to the stimulus material. Alternatively, two marks may be credited for one feature which is described in detail. Credit may be given for a diagrammatic representation although this is not required by the question.

AO2 Up to two marks for reference to the stimulus material which illustrates the identified feature(s). If one feature is identified, then two marks may be credited if the application of this feature is detailed.

- (d) Describe and discuss the cognitive approach in psychology. Refer to **one** other approach in your answer. (10 marks)

[10 marks : AO1 = 5, AO2 = 5]

AO1 Up to five marks for description of features of the cognitive approach. Features could include - the comparison of the human mind to a computer in terms of information processing. How it is therefore possible to study the internal mental processes that lie between stimulus and response. Other features may include the scientific basis of this approach. Internal mental processes can be investigated scientifically by proposing models of psychological function. Up to two marks may be awarded for a description of a model.

AO2 Up to five marks for discussion, eg that the cognitive approach has investigated many areas of interest in psychology that had been neglected by behaviourism. The approach places great emphasis on the use of more rigorous scientific methods unlike psychoanalysis. Candidates may contrast it with the free will approach of the humanists arguing that the cognitive approach ignores the emotional life of humans and their conscious experience. Credit may be given for application of the cognitive approach through examples of models eg Atkinson and Shiffrin's multi-store model of memory.

Maximum of 6 marks if no reference to other approaches.

Mark Bands

8 – 10 marks

Good answers

The candidate will have accurately described the cognitive approach in detail. The candidate will have thoroughly discussed the approach and will have appropriately referred to another approach with accuracy. The response is focused on the question.

4 – 7 marks

Average answers

The candidate will have described the approach though lacking in detail. At the top of the band, limited discussion will be evident, and there may be minimal reference to another approach. For 6/7 marks, there must be some discussion. There may be slight inaccuracy and/or irrelevance.

At the bottom of the band, the candidates will be largely descriptive and another approach may be absent. Discussion may be little more than a comment. At the bottom of the band the answer will be superficial.

1 – 3 marks

Poor answers

The candidate has demonstrated a lack of understanding of the approach and has presented a response with no reference to other approaches of discussion. The response may also be inaccurate and confused.

Total AO1 marks for Question 1: 11

Total AO2 marks for Question 1: 9

Total marks for Question 1: 20 marks

2

Total for this question: 20 marks

(a) Identify **two** techniques used to investigate cortical specialisation. (2 marks)

[2 marks : AO1 = 2, AO2 = 0]

AO2 One mark for any appropriate answer.

Example: Neurosurgery, EEGs, electrical stimulation, post-mortem, scans – CAT, PET, MRI.

Credit may be give for more than one method of scanning.

(b) Each of the descriptions below gives a function of a part of the nervous system:

A supports and restores normal body activity by conserving and storing energy;

B carries messages from the brain or spinal cord to the muscles;

C prepares the body for action in threatening situations.

In your answer book write down which function (**A**, **B** or **C**) is a description of the activity of

(i) a motor neuron;

(ii) the autonomic nervous system (sympathetic branch);

(iii) the autonomic nervous system (parasympathetic branch). (3 marks)

[3 marks : AO1 = 3, AO2 = 0]

AO1 (i) (B) carries messages from the brain or spinal cord to muscles;
(ii) (C) prepares the body for action in threatening situations;
(iii) (A) supports and restores normal body activity by conserving and storing energy.

(c) Outline what is meant by *adoption studies* and explain why they are used by psychologists. (5 marks)

[5 marks : AO1 = 2, AO2 = 3]

AO1 Maximum of two marks for a description of adoption studies, eg involves comparing a characteristic or trait between adopted children and children of their biological parents. Reference to the role of genes and the environment. Credit may be given for an example of a specific behaviour, eg intelligence/schizophrenia. One mark if this description is not complete or is inaccurate.

AO2 Three marks for explanation, eg to see if a trait or characteristic is heritable, then children should show greater similarity to their biological parents than adopted parents. Relevant research e.g. Cloniger (1987) alcoholism may be cited as evidence. If concordance/correlation/similarity for adopted children is higher with natural parents than adopted parents, then the trait is biological.

- (d) Discuss how knowledge about localisation of function has contributed to our understanding of behaviour. Refer in your answer to **at least two** examples of cortical localisation of function. (10 marks)

[10 marks : AO1 = 4, AO2 = 6]

AO1 Identification/description of ways in which knowledge of localisation has contributed to understanding of behaviour. Up to two marks allocated for reference to two examples of localisation of function. Examples may include – Broca’s area, Wernicke’s area, visual cortex, abstract reasoning (frontal lobe). May include reference to a study. Specific technical terms not required for credit.

AO2 Candidates will discuss how localisation of function contributes to our understanding. Reference may be made to the case of brain asymmetry where variations are apparent in the location of function in the two cerebral hemispheres. Also, the brain as an integrated unit may be discussed where, for example, many different areas are involved in abilities such as vision. Candidates may refer to the argument of brain plasticity in adjusting the location of function in the case of brain damage, for example. Credit may be given for application, eg the impact of brain damage/strokes. Specific technical terms may not be present in the discussion. No studies are required by the question, but credit may be given to those which specifically illustrate the point being made.

Maximum 5 marks if only one example.

Mark Bands

- 8 – 10 marks **Good answers**
The candidate will have accurately displayed knowledge regarding localisation of function, possibly including technical terminology. Discussion will refer to how this contributes to our understanding and be evident throughout the answer. There will be minimal inaccuracy.
- 4 – 7 marks **Average answers**
At the top of the band, the candidate will have referred to examples of localisation of function though this may not have been accurately described. Discussion will be evident although limited.

At the bottom of the band, the candidate will be largely descriptive and answers knowledge-based but should be largely correct. Above five marks, discussion must be present albeit limited.
- 1 – 3 marks **Poor answers**
The candidate demonstrates a poor understanding of localisation of function and is largely descriptive in their response. Discussion, if present, is brief and shows little understanding of the contribution to our understanding. There may be inaccuracies.

Total AO1 marks for Question 2: 11

Total AO2 marks for Question 2: 9

Total marks for Question 2: 20 marks

SECTION B: RESEARCH METHODS

3

Total for this question: 20 marks

- (a) (i) What do the mean scores indicate about performance of a sensori-motor task in the sample? Justify your answer. (2 marks)

[2 marks : AO1 = 1, AO2 = 1]

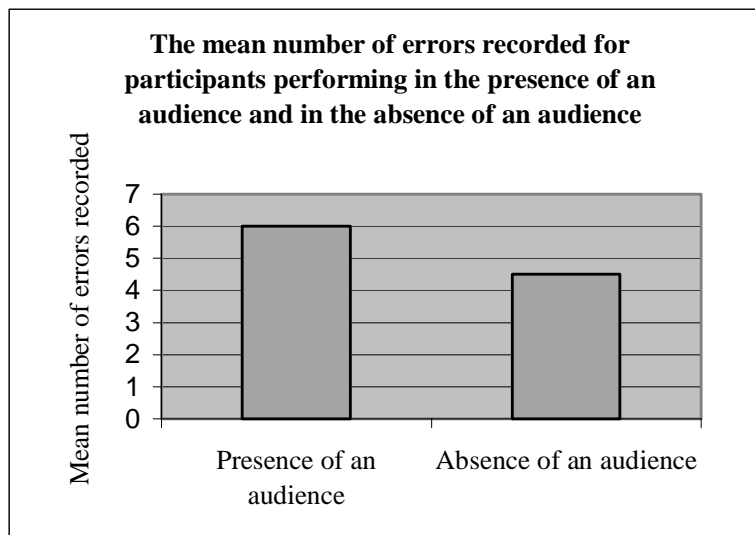
AO1 Description of results for either or both conditions - presence and absence of an audience. More errors were made in the presence of an audience.

AO2 Analysis of data, the mean is considerably higher (6.0) in the presence of an audience compared to (4.5) without an audience.

- (ii) Using the mean values for errors recorded given in **Table 1**, sketch an appropriate bar chart. Fully label your bar chart. (3 marks)

[3 marks : AO1 = 3]

Table:



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) (i) Outline the type of experimental design used in this study. (2 marks)

[2 marks : AO1 = 2]

AO1 One mark for stating the type of experimental design. Independent groups/measures/between subjects/unrelated. Any other appropriate term may be credited. One mark for further outline, eg that different participants take part in each experimental condition.

(ii) With reference to the study, state **one** advantage of using the design you have identified in (b) (i). (2 marks)

[2 marks : AO1 = 1, AO2 = 1]

AO1 One mark for there are no order effects, the same task can be used in both conditions, or similar response.

AO2 One mark for reference to the study, eg for order effects, performance of the sensori-motor task is unaffected by practice as participants only take part in one condition.

(c) The psychologist used a one-way mirror to observe each participant's performance without him or her knowing.

(i) Explain why the psychologist did not want to be seen by the participants. (2 marks)

[2 marks : AO1 = 1, AO2 = 1]

AO1 One mark for identification, eg elimination of confounding variables.

No credit for repetition of the stem.

AO2 One mark for explanation, eg the psychologist was able to ensure none of the participants cheated during the experiment. Alternatively, candidates may explain that if the psychologist had been present in the same room during the experiment, then this would have confounded the results.

No credit for repetition of the stem.

- (ii) Identify and briefly discuss **one** ethical issue raised by **this** method of observation. (3 marks)

[3 marks : AO1 = 1, AO2 = 2]

- AO1** One mark for identification of ethical issue, eg deception, invasion of privacy, lack of informed consent.
- AO2** Two marks for discussion, eg participants are misled into believing they are performing the sensori-motor task in the absence of an audience. However, if participants were aware they were being observed then the research is largely pointless because both conditions would have an audience.

Maximum 1 mark for an ethical issue not specifically related to this method of observation.

- (d) The psychologist used opportunity sampling to select the forty participants for this study.

Explain why a random sample might have been a better technique for the psychologist to use than an opportunity sample. (3 marks)

[3 marks : AO1 = 1, AO2 = 2]

- AO1** One mark for stating that a random sample means that every member of the target population has an equal chance of being selected.
- AO2** One mark for explaining why the technique is preferable, eg ensures there is no bias in selection of participants. One further mark for relation to opportunity sampling, eg where bias can occur in the selection of participants.

- (e) To discover what the participants thought about their performance in the presence or absence of an audience, the psychologist conducted an interview with each of them. She decided to use a structured interview rather than an unstructured interview.

Discuss **one** advantage of the structured interview technique. (3 marks)

[3 marks : AO1 = 1, AO2 = 2]

- AO1** One mark for advantage, eg the method is standardised.
- AO2** Two marks for discussion, eg it allows the psychologist to easily analyse the data. However, it does not allow for spontaneity of responses from participants. As a result, they are restricted in the answers they can provide.

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) Outline what is meant by the term *sex-role stereotype*. (2 marks)

[2 marks : AO1 = 2, AO2 = 0]

AO1 Two marks for recognition of the term.

Example: A sex-role stereotype is a belief about what is typical and appropriate behaviour for males and females (AO1, 1). This forms an over-simplified expectation of behaviour from members of that group (AO1, 1).

Credit outline that may be implicit in relevant example.

(b) Explain what is meant by *androgyny*. In your answer, give an example of how a person might show androgynous behaviour. (3 marks)

[3 marks : AO1 = 1, AO2 = 2]

AO1 One mark for brief recognition of the term.

AO2 One mark for explanation of the term plus one mark for an appropriate example.

Example: Androgyny is a term used to describe an individual who possesses traits regarded as both typically masculine and feminine (AO1, 1). They have no problem in accepting their sexual identity but accept masculine and feminine traits that form their personality (AO2, 1) for example, a female may be affectionate and caring as a mother, but also forceful and ambitious within her work-role (AO2, 1).

(c) Describe **one** study in which the observational method was used to investigate gender. Indicate in your answer why the study was conducted, the method used, the results obtained, and the conclusion drawn. (5 marks)

[5 marks : AO1 = 5, AO2 = 0]

AO1 Any appropriate study in which observation was used to study gender, eg Dweck et al (1978), Lloyd (1989), Parke (1967), Fagot (1985), Janis and Janis (1976).

One mark – why the study was conducted

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

- (d) Psychologists use several methods to investigate gender differences in behaviour. These may raise both methodological and ethical issues.

With reference to **either** content analysis **or** the experimental method, discuss issues which might arise when investigating gender differences. Refer to empirical evidence in your answer.
(10 marks)

[10 marks : AO1 = 4, AO2 = 6]

AO1 At least two issues will be identified and described. If the candidate selects content analysis, the focus might be on the coding of content according to pre-determined categories. Certain categories of behaviour can be selected to analyse.

If the candidate selects the experimental method, the focus should be on strength of control, replicability, reliability in the data or any other appropriate response.

Ethical issues which the candidate may raise are, eg for content analysis, the issues which arise may be in relation to the stimulus material used by researchers, confidentiality, reinforcement of sex-role stereotypes.

The experimental method may raise ethical issues such as exposure to material that influences individuals to perceive themselves and/or others in a negative way, or the long-lasting negative effects on children.

AO2 The issues should be discussed with explicit reference to gender. For example, in relation to content analysis, the issue of subjectivity of scoring processes and the problems that causes may be discussed. Candidates may refer to studies by Lobban (1974), Manstead and McCulloch (1981). Although the researchers are not criticised specifically, the method of content analysis in general is.

With the experimental method, candidates may discuss the problem of generalisability to 'real-life' (Kitto, 1989) or discuss how the design of a study may suggest gender differences rather than actual differences between men and women - a change in design can show a different view of gender (Piaget and Inhelder, 1958). Gender differences may therefore be an artefact of methodology. Candidates that have raised ethical issues in AO1 should discuss how these ethical issues might be overcome with explicit reference to gender research, eg consent may be sought from a child's parent, debriefing, the right to withdraw from the investigation or any other appropriate response.

Maximum 5 marks if no reference to empirical research.

Mark Bands

8 – 10 marks

Good answers

The candidate will have correctly identified and explained at least two methodological and/or ethical issues relevant to the study of gender. Discussion of the issues with reference to empirical evidence is accurately presented throughout the response and with focus to the question.

4 – 7 marks

Average answers

At the top of the band the candidate correctly identifies and explains at least two methodological and ethical issues relevant to the study of gender. Discussion of the issues will be present albeit limited. There is some reference to empirical evidence.

At the bottom of the band the candidate may refer to one methodological or ethical issue. There is some reference to gender, but the response lacks relevance in relation to the issue. There must be some discussion for five marks. Below this mark, there will be no discussion or reference to empirical evidence.

1 – 3 marks

Poor answers

The candidate may have referred to an issue but there are inaccuracies in the explanation. No specific relation to gender is present in the response.

Total AO1 marks for Question 4: 12

Total AO2 marks for Question 4: 8

Total marks for Question 4: 20 marks

5

Total for this question: 20 marks

- (a) Describe what psychologists mean by the term *gender constancy*. Use an example to illustrate your answer. (3 marks)

[3 marks : AO1 = 2, AO2 = 1]

AO1 One mark for correct description of the term gender constancy. One mark for relating the given example to gender constancy.

AO2 One mark for appropriate example.

Example: Gender constancy refers to the understanding that someone stays the same biological sex (AO1, 1) despite changes in appearance (AO1, 1). For example, a child understands that although a girl who has short hair and wears trousers may look like a boy, she is really still a girl (AO2, 1).

- (b) Identify **one** atypical sex chromosome pattern and describe the effect that it may have on an individual. (3 marks)

[3 marks : AO1 = 3, AO2 = 0]

AO1 One mark for correct identification of atypical sex chromosome pattern. Accept name of condition. Two marks for appropriate description of the effect on behaviour.

Examples: XO [Turner's syndrome] (AO1, 1). Girls tend to display higher than average verbal ability (AO1, 1) but lower than average mathematical skills, spatial ability and visual memory (AO1, 1).

Credit may also be given for a description of physical characteristics such as lack of maturation at puberty, webbing of the neck. Social characteristics such as poor peer relationships, difficulty in social readjustments at school, may also be credited.

- (c) Katie and Ayisha are 6 years old. They are both playing with their toy kitchen. Peter, who is also 6 years old, asks the girls if he can join in. Katie and Ayisha refuse, saying, "Only mummies do cooking."

How would social learning theorists explain the girls' refusal to let Peter join in? (4 marks)

[4 marks : AO1 = 2, AO2 = 2]

AO1 Two marks for reference to aspects of social learning theory, eg observation, imitation, identification, modelling, vicarious reinforcement of attributes and attitudes associated with gender, behaviour is due to environment influences.

AO2 Two marks for reference to the stimulus material that illustrates the aspects identified. The application to the stimulus material should be detailed to gain two marks. For example, Katie and Ayisha have observed only girls playing with a toy kitchen and therefore see this form of play as appropriate for girls and not boys.

- (d) Describe and discuss the psychoanalytic explanation of gender development. Refer to **one** other explanation in your answer. (10 marks)

[10 marks : AO1 = 5, AO2 = 5]

- AO1** Up to 5 marks for description of the psychoanalytic explanation of gender development - could include the role of parents in the acquisition of gender, identification during the phallic stage, oedipal and electra complex.
- AO2** Up to 5 marks for discussion of the psychoanalytic explanation in relation to one other explanation. For example, the psychoanalytic explanation emphasises the unconscious/conscious in gender acquisition (nature) but fails to fully appreciate the role of nurture/environment such as the social learning theorists. The benefits of the psychoanalytic explanation such as emphasising the role of parents in gender development may be illustrated by reference to the limitations of the biological explanation. Candidates may contrast the timing of gender identity during the phallic stage with the cognitive explanation who view this process as developing over a number of years in childhood.

Maximum of 6 marks if no reference to one other explanation.

Mark Bands

8 – 10 marks

Good answers

Candidates will show a clear understanding of the features of the psychoanalytic explanation and have described these features in detail. There will be a clear and accurate discussion in relation to one other explanation.

4 – 7 marks

Average answers

At the top of the band, candidates will show an understanding of the psychoanalytic explanation although the feature(s) may be lacking in detail. There must be some discussion for 6/7 marks. Candidates may make only a brief reference to one other explanation.

At the bottom of the band, candidates will be largely descriptive in their response. There may be evidence of discussion but it is no more than a comment.

1 – 3 marks

Poor answers

Candidates will present a response with minimal description of the psychoanalytic explanation. There must be some relevant content, but this is largely inaccurate and/or muddled. No discussion or reference to one other explanation is present in the response.

Total AO1 marks for Question 5: 12

Total AO2 marks for Question 5: 8

Total marks for Question 5: 20 marks

ASSESSMENT GRID

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