



ASSESSMENT and  
QUALIFICATIONS  
ALLIANCE

# Mark scheme January 2003

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## GCE

### Psychology B

### Unit PYB5

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**Unit 5: Perspectives, Debates and Methods****Quality of Written Communication**

|               |  |   |
|---------------|--|---|
| <b>Band 1</b> | Excellent Quality of Communication     | The candidate will express complex psychology ideas extremely clearly and fluently. Sentences and paragraphs will follow on from one another smoothly and logically with appropriate use of psychological terminology. Presentation of psychological concepts and arguments will be consistently relevant and well structured. There will be few, if any errors of grammar, punctuation and spelling.   |
| <b>Band 2</b> | Average Quality of Communication       | The candidate will express moderately complex psychological ideas clearly and reasonably fluently, through well-linked sentences and paragraphs. Some, but not consistent, use of psychological terminology. Presentation of psychological concepts and arguments will be generally relevant and well structured. There may be occasional errors of grammar, punctuation and spelling.  |
| <b>Band 3</b> | Below average Quality of Communication | The candidate will express straightforward psychological ideas clearly, if not always fluently. Sentences and paragraphs may not always be well connected. Use of psychological terminology may be limited. Presentation of psychological concepts and arguments may sometimes stray from the point or be weak. There may be some errors of grammar, punctuation and spelling, but not such as to suggest a weakness in these areas or to obscure the psychological meaning.                            |
| <b>Band 4</b> | Poor Quality of Communication          | The candidate will express simple psychological ideas clearly, but may be imprecise and awkward in dealing with complex or subtle concepts. Use of mainly non-specialist language with little, if any, reference to psychological terminology. Presentation of psychological concepts and arguments may be of doubtful relevance or obscure. Errors in grammar, punctuation and spelling may be noticeable and intrusive, suggesting weaknesses in these areas and obscuring the psychological meaning. |

**Section A: Perspectives in Psychology****1****Total for this question: 20 marks**

- |   |
|---|
| (a) Outline what is meant by operant conditioning and suggest how it could be used to explain why Alex now throws things at other children. <span style="float: right;"><i>(4 marks)</i></span> |
|---|

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

AO1 Two marks available for outline of operant conditioning, eg learning due to the consequences of behaviour (1). The behaviour has become more frequent due to reinforcement (1). Credit other correct responses up to two marks.

AO2 marks for applying operant conditioning to Alex's behaviour. One mark for the consequences of behaviour (attention). One mark for the 'throwing behaviour' becoming more frequent due to the consequences. Credit other correct responses such as behaviour being maintained by the consequences. Accept explanations outside the above context, eg home for a max of one mark for AO2.

- |   |
|---|
| (b) Identify and briefly explain <b>two</b> similarities between human cognition and the way computers process information. <span style="float: right;"><i>(4 marks)</i></span> |
|---|

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

AO1 One mark for identifying each similarity.

Possible similarities: Both are information processing systems, have capacity limitations and are symbol systems.

AO2 One mark for a brief explanation of each.

Possible points regarding information processing systems; information flows through a series of internal stages; information is taken in, operated upon, transformed and integrated with information already stored in memory; this can be applied to human cognition with regard to memory.

- (c) Describe and discuss **at least one strength and at least one weakness** of the cognitive perspective in psychology. Refer to another perspective in your answer. *(12 marks)*

**[12 marks: AO1=6, AO2=6]**

- AO1     y up to 3 marks each for describing strength(s) and weakness(es) of the cognitive approach. Maximum of 6 marks for describing both strength(s) and weakness(es). Strengths may include: use of the scientific method, investigates areas neglected by the behaviourists, provides useful practical applications, explains a wide range of behaviours, supported by evidence, plausible. Weaknesses may include: reductionist, mechanistic, using behavioural measures to infer mental processes.
- AO2     Usually up to 3 marks for discussion of strength(s)/weakness(es) which may compare the cognitive perspective with one other perspective. Award AO2 marks for analysis or points relating to application or evaluation up to 6 in total. Perspectives taken for comparison will most likely be humanistic and behaviourist but any perspective is possible and creditworthy, eg humanistic and psychoanalytic lack scientific rigour, behaviourists ignore internal processes, biological perspective takes a reductionist approach rather than an approach at a functional psychological level. Nevertheless, each of the above perspectives could point to weaknesses in the cognitive approach either focusing on subject matter or methodology. Candidates may compare the cognitive approach with just one perspective or choose to cover more if appropriate. Credit references to research and or topic areas if applied to the discussion.

**Answers referring to only strength(s) or weakness(es), max 7 marks**

**Answers referring to the cognitive perspective only, max 6 marks**

**Mark bands**

- 12 – 10 marks    **Excellent answers**  
Strength(s) and weakness(es) clearly identified, described and thoroughly discussed with reference to another perspective. The answer may be supported with reference to empirical work or a topic area though this is not essential. The answer is clearly focussed on the question with few if any omissions, irrelevancies or inaccuracies. The answer shows a sound understanding of the approach and the discussion is well balanced with a logical conclusion.
- 9 – 7 marks    **Good to average answers**  
Answers in this band must refer to one other perspective. Strength(s) and weakness(es) must be identified with some detailed discussion for 8/9 marks. Answers may show some imbalance. At the lower end of the band both strength(s) and weakness(es) may be attempted but with limited discussion or either strength(s) or weakness(es) identified, described and thoroughly discussed.
- 6 – 4 marks    **Average to poor answers**  
Answers may get little beyond identifying and describing strength(s) and weakness(es). Better answers may attempt some discussion and there will probably be some reference to another perspective. Answers in this band will lack detail.
- 3 – 1 marks    **Poor answers**  
Answers in this band must have some relevant content, perhaps fair description related to strength(s) and weakness(es). There are probably substantial inaccuracies and /or irrelevance. A valid but extremely brief, perhaps unfinished answer will come into this band.

**Synoptic assessment**

The question encourages candidates to make links with module 2 of AS. Part (c) allows candidates to make links with any perspectives in psychology.

Total AO1 marks for Question 1: 10

Total AO2 for Question 1: 10

2

Total for this question: 20 marks

|   |
|---|
| (a) Identify and explain <b>one</b> similarity between the theories of Rogers and Maslow. (4 marks) |
|---|

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

AO1 These marks are for identifying a similarity, positive view of human nature or drive for self-actualisation, one mark and one mark for some expansion such as explaining what self-actualisation means.

AO2 For full marks answers must refer to both theories, eg for self-actualisation, the basic actualising tendency of Rogers and the peak of Maslow's hierarchy of needs, the need for self-actualisation, must be referred to. One mark only if a general point about the humanistic approach is made without reference to each theorist or if the answer is vague.

|  |
|--|
| (b) Outline what Freud meant by the term <i>defence mechanism</i> and explain how this concept is illustrated in the case study above. (4 marks) |
|--|

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

AO1 Two marks for an accurate outline of defence mechanism including main points. It is essential that candidates refer to the fact that this is an unconscious strategy. Other points may include the fact that defence mechanisms protect the conscious mind from anxiety or that they involve a distortion of reality in some way so that we are better able to cope with a situation.

One mark only for a brief and/or vague attempt.  
Max one mark for a list of defence mechanisms.

AO2 These 2 marks are for application of the concept to the stimulus material and any relevant analytical point. If the candidate does not refer to the stimulus material and thus does not explain how a defence mechanism might be illustrated by the case study then no AO2 marks can be awarded. Candidates are likely to refer to the frightening/anxiety provoking event (1); thoughts and memories that might provoke anxiety are repressed (primary repression) (1). The fact that therapy was required to access the unconscious mind and the information was not readily available to the conscious mind (1), the dynamic nature of the repressed material and its effect on behaviour (1). Credit any elaboration of any of the points, eg the symptoms (paralysis) bearing a resemblance to the frightening event (not being able to move the arm). Candidates can make two brief points demonstrating application or one but with more analysis.

- (c) Describe and discuss contributions of the psychoanalytic perspective to understanding human behaviour. In your answer refer to **at least two** topics in psychology that you have studied.

*(12 marks)*

[12 marks: AO1=6, AO2=6]

AO1 marks can be gained by providing relevant details of Freud's theory or post-Freudian theories, by providing relevant details of the perspective or by giving an outline of contributions. Even though the emphasis is on contributions, allow a max. of 2 marks for outline of limitations.

Contributions will probably cover the importance of the unconscious mind in motivating behaviour, the importance of childhood experiences and applications to vast areas of psychology such as aggression, personality development, abnormality, moral and gender development, memory. Post-Freudians if included will probably refer to Erikson, Jung, Adler and Klein.

AO2 Award AO2 marks for analysis, evaluation and application of knowledge to the discussion. Award marks for limitations if set in the context of contributions. Credit references to research if applied to the discussion.

**Answers referring to only one topic, max 7 marks**  
**Max 6 if no topic included**

**Mark bands****12 – 10 marks    Excellent answers**

Contributions clearly identified, described and thoroughly discussed with reference to theories and/or the perspective and applied to topic areas. The answer must refer to two topic areas and may be supported with reference to empirical work though this is not essential. The answer is clearly focussed on the question with few if any omissions, irrelevancies or inaccuracies. The answer shows a sound understanding of the approach and the discussion is well balanced with a logical conclusion.

**9 – 7 marks    Good to average answers**

Contributions must be identified with some detailed discussion and reference to two topic areas for answers at the top of the band (9/8). At the lower end of the band both contributions and reference to topic area(s) may be attempted but with minimal discussion.

**6 – 4 marks    Average to poor answers**

Answers may get little beyond identifying and describing contributions. Better answers will attempt some discussion and there will probably be some reference to a topic area. Answers in this band will lack detail.

**3 – 1 marks    Poor answers**

Answer in this band must have some relevant content, perhaps fair description related to the question. There are probably substantial inaccuracies and /or irrelevance. A valid but extremely brief, perhaps unfinished answer will come into this band.

**Synoptic assessment**

The question encourages candidates to make links with module 1 of AS. Part (c), by asking for contributions to psychology, allows candidates to make links with any topics in psychology and to assess the psychoanalytic perspective within psychology as a whole.

Total AO1 marks for Question 2: 10

Total AO2 for Question 2: 10



**Section B: Debates in Psychology**

3

**Total for this question: 20 marks**

|  |
|--|
| (a) (i) Outline what is meant by hypothesis testing and explain its role in scientific research. (4 marks) |
|--|

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

AO1 One mark for outline of hypothesis testing, eg a statement made at the beginning of an investigation that serves as a prediction. One mark for an expansion such as the different types of hypotheses (null and alternative) or need to be stated in a form that can be tested, i.e. unambiguous and operationalised or derived from a theory.

AO2 mark for explaining the link between observations/theories and the need to make a prediction which can be tested.

mark for an expansion, eg reference to accepting/rejecting a hypothesis and implications for the theory or other credit worthy points such as unless you formulate a prediction for testing behaviour derived from theory or observations it is all too easy to find support for a particular belief.

|   |
|---|
| (ii) Identify and outline <b>two other</b> features of the scientific approach in psychology. (4 marks) |
|---|

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

AO1 One mark for identifying each feature and one mark for a brief accurate outline. Possible features: Objectivity, empirical evidence, replicability, prediction and control, use of theories (1).

Brief outline (empirical evidence), eg scientific approach is based on collection of data through observation and experiment, and not on argument or belief which is the common sense approach or (replicability), eg experiments and observations are carried out rigorously and reported in detail, so that other investigators can repeat and attempt to verify the work (1).

(b) Discuss limitations of the scientific approach in psychology. Illustrate your answer with reference to **at least two** topics you have studied. (12 marks)

**[12 marks: AO1=4, AO2=8]**

AO1 These marks can be gained by outlining applications of the scientific approach, outlining the limitations or by providing relevant descriptive details of the topic areas to which the debate will be applied. Candidates will probably do all three but it is possible that better candidates will not in fact provide much description of a topic area but will refer to it in discussion. Limitations may refer to the subject matter, objectivity, generality, testability, ecological validity, ethical issues and philosophical debates etc.

AO2 There is plenty of scope in this question for application, analysis and evaluation. Candidates must make it clear why the scientific approach is sometimes not appropriate and must refer to scientific criteria. Any topic areas are acceptable as long as they are made relevant to the argument. Topic areas can be taken from *conditioning theories*; objectivity, testability (candidates will be expected to raise the question of extrapolating to human participants), *personality structure*; testability, generality, replicability, *social influence*; ecological validity and generality, *cognitive psychology*; ecological validity and testability etc. Credit references to ethical and practical constraints eg *child development*.

**Answers referring to only one topic area, max 7 marks**

**Answers referring to only one limitation, max 7 marks**

**Max 6 if no topic included**

**Mark bands****12 – 10 marks    Excellent answers**

The applications of the scientific approach and related limitations are clearly identified, described and thoroughly discussed with reference to at least two topics. The answer may be supported with reference to specific empirical work though this is not essential. The answer is clearly focussed on the question with few if any omissions, irrelevancies or inaccuracies. The answer shows a sound understanding of the scientific approach and the discussion is logical and contains a clear conclusion.

**9 – 7 marks    Good to average answers**

Answers in this band must refer to topic area(s). The applications of the scientific approach and related limitations are identified, described and discussed with reference to at least two topics for answers at the top of the band. There must be some detailed discussion for answers at the top of the band (9/8). At the lower end of the band reference to the applications of the scientific approach and related limitations may be less well directed, with limited discussion and may refer to one limitation only.

**6 – 4 marks    Average to poor answers**

Answers may get little beyond identifying and describing the applications of the scientific approach and related limitations or identifying and describing a topic area but without the application/analysis required for a good answer. Better answers will attempt some discussion and there will probably be some reference to a topic area. Answers in this band will lack detail or will just focus on one limitation such as ethical issues.

**3 – 1 marks    Poor answers**

Answers in this band will have some relevant content, perhaps a fair description related to the question. There are probably substantial inaccuracies and /or irrelevance. A valid but extremely brief, perhaps unfinished answer will come into this band.

**Synoptic assessment**

The question encourages candidates to make links with AS modules. Part (c), by asking for topic areas allows candidates to make links with any topics in psychology and to assess the scientific approach within psychology as a whole.

Total AO1 marks for Question 3: 10

Total AO2 for Question 3: 10

4

Total for this question: (20 marks)

|  |
|--|
| (a) Using an example from psychology, explain what is meant by <i>reductionism</i> . (4 marks) |
|--|

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

AO1 One mark for outline of reductionism, eg an attempt to explain complex phenomena by reducing them to combinations of simpler components or one level of explanation such as the molecular level. One mark for an expansion such as it contrasts with the holistic approach or takes several forms in psychology or explanations at a biochemical /physiological level.

AO2 These are for the application of reductionism to an example in psychology. Two marks for a correct example and an explanation as to why it illustrates reductionism. Possible examples could come from biochemical and physiological explanations of schizophrenia, problem solving reduced to computer simulations (machine reductionism).  
One mark for an example but not an adequate explanation or an attempt at an explanation but an inadequate example.

|  |
|--|
| (b) Identify and describe <b>one</b> limitation of reductionism in psychology. (4 marks) |
|--|

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

AO1 One mark for identifying a limitation.  
Possible limitations: single causal explanations are an oversimplification, distract attention from other levels of explanation.  
Three marks for a description which could include a reference to an example or some expansion/detail or make reference to holism or gestalt approach.  
One mark for each relevant point made.

|   |
|---|
| (c) “A balance between nomothetic and idiographic approaches is needed for a complete study of psychology.” |
|---|

Discuss this statement with reference to at least one topic area in psychology. (12 marks)

**[12 marks: AO1= 4, AO2=8]**

AO1 These marks can be gained by outlining characteristics of both approaches or by providing details from the topic area, including research, to which the debate will be applied. Possible content areas where both approaches have been applied are memory, gender, and child development.

AO2 There is plenty of scope in this question for application, analysis and evaluation. Candidates can argue for or against the statement but must make clear that they appreciate the differences between the approaches and their relative and/or combined benefits thus demonstrating an appreciation of balance. Any topic areas are acceptable as long as they are made relevant to the argument.

**Answers not referring to a topic area, max 6 marks**

**Mark bands****12 – 10 marks    Excellent answers**

The assumptions and methods of the two approaches are clearly identified and thoroughly discussed with reference to at least one topic. The answer may be supported with reference to specific empirical work though this is not essential. The answer is clearly focussed on the question with the issue of ‘balance’ clearly addressed, and few if any omissions, irrelevancies or inaccuracies. The answer shows a sound understanding of the approaches and the discussion is well balanced with a logical and clear conclusion.

**9 – 7 marks    Good to average answers**

Answers in this band must refer to a topic area. The assumptions/methods of the two approaches must be identified with some detailed discussion for answers at the top of the band (9/8). Answers may be not entirely focussed on ‘balance’. At the lower end of the band reference to the approaches may be less well directed and with limited discussion and little attention to ‘balance’.

**6 – 4 marks    Average to poor answers**

Answers may get little beyond identifying and describing the approaches or a topic area but without the application/analysis required for a good answer. Better answers will attempt some discussion and there will probably be some reference to a topic area. Answers in this band will lack detail.

**3 – 1 marks    Poor answers**

Answers in this band will have some relevant content, perhaps a fair description related to the question. There are probably substantial inaccuracies and /or irrelevance. A valid but extremely brief, perhaps unfinished answer will come into this band.

**Synoptic assessment**

The question encourages candidates to make links with AS modules and module 4. Part (c), by asking for topic areas allows candidates to make links with any topics in psychology and to assess the two approaches, both individually and in combination within psychology as a whole.

Total AO1 marks for Question 4: 10

Total AO2 for Question 4: 10

**Section C: Methods in Psychology****5****Total for this question: 20 marks**

- |  |
|--|
| (a) Draw a rough sketch to display the correlation between scores on the football knowledge questionnaire and recall scores. Label the sketch appropriately. (3 marks) |
|--|

**[3 marks: AO2=3]**

AO2 One mark for sketching a scattergraph or for line or for scores. Essential for full 3 marks.  
Two marks max for labelling. One mark for each axis or one mark for heading.

- |  |
|--|
| (b) State an appropriate null hypothesis for this study. (2 marks) |
|--|

**[2 marks: AO2=2]**

AO2 One mark for stating no (significant) correlation/relationship or any correlation/relationship is due to chance.  
One mark for stating the two associated variables.

- |  |
|--|
| (c) (i) State <b>two</b> conditions which need to be met for her to use a parametric test. (2 marks) |
|--|

**[2 marks: AO1=2]**

AO1 Any two from; interval/ratio data, homogeneity of variance, normal distribution of scores or scores from a normally distributed population. Mark first two answers only.

- |   |
|---|
| (ii) Name a non-parametric test which could be used to calculate a correlation coefficient using the data from this study. (1 mark) |
|---|

**[1 mark: AO2=1]**

AO2 Spearman's Rho. (1). Markers should be aware of other acceptable answers, eg Kendal's Tau. Accept first answer only unless accompanied by an explanation.

- |  |
|--|
| (d) Explain what is meant by a <i>Type I error</i> . (2 marks) |
|--|

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

AO1 The null hypothesis is rejected when it should have been retained (1).

AO2 or made following statistical analysis (1).  
Credit any other explanations such as more likely to occur following 5% rather than 1% significance level or the meaning of 'probability'.

- (e) The psychologist avoided using questions which were all easy or all difficult in the questionnaire. Explain why this might have been important. (2 marks)

**[2 marks: AO2 = 2]**

AO2 To ensure a good spread of scores (1).  
One mark for expansion, eg reference to floor/ceiling effects or to discriminate between experts and those who knew little or nothing.

- (f) Describe **one** way of measuring the reliability of this questionnaire. (3 marks)

**[3 marks: AO3=3]**

AO3 Answers can deal with internal or external reliability.  
Split half method (1).  
Items divided by odds and evens (1).  
If reliable then the two halves should have similar scores and this can be assessed using a correlation (1).  
Credit reference to high positive correlation.  
  
Test-retest (1).  
Tested once and then some time later again (1).  
The two sets of scores are correlated to see whether the same people tend to get similar scores on the second occasion (1).  
Credit reference to high positive correlation.

- (g) One participant in the study performed exceptionally well on the recall of football results. It was decided to conduct a case study using this participant.

- (i) Briefly describe how the psychologist might have carried out the case study. (2 marks)

**[2 marks: AO1=2]**

AO1 Credit reference to consent, interview and type (formal/informal) observation, location of the study. One mark for each relevant point.

- (ii) Discuss what could be gained from the case study that could not be gained from the correlation study above. (3 marks)

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

AO1 Wealth of information and in-depth (1).

AO2 Candidate must demonstrate analysis and/or evaluation. Discussion of types of information gained, eg memory strategies, personal experiences and that the information may generate hypotheses for testing in a more experimental way. One mark for a superficial attempt, 2 marks for a substantial discussion.

Total AO1 marks for Question 5: 6

Total AO2 for Question 5: 11

Total AO3 for Question 5: 3 marks

## Assessment grid

| Question                 |          | Assessment Objectives           |                             |                                   | Total       |
|--------------------------|----------|---------------------------------|-----------------------------|-----------------------------------|-------------|
|                          |          | AO1 Knowledge and Understanding | AO2 Analysis and Evaluation | AO3 Design, Conduct, Reports etc. |             |
| 1.                       | (a)      | 2                               | 2                           |                                   | 20          |
|                          | (b)      | 2                               | 2                           |                                   |             |
|                          | (c)      | 6                               | 6                           |                                   |             |
| 2.                       | (a)      | 2                               | 2                           |                                   | 20          |
|                          | (b)      | 2                               | 2                           |                                   |             |
|                          | (c)      | 6                               | 6                           |                                   |             |
| 3.                       | (a) (i)  | 2                               | 2                           |                                   | 20          |
|                          | (a) (ii) | 4                               |                             |                                   |             |
|                          | (b)      | 4                               | 8                           |                                   |             |
| 4.                       | (a)      | 2                               | 2                           |                                   | 20          |
|                          | (b)      | 4                               |                             |                                   |             |
|                          | (c)      | 4                               | 8                           |                                   |             |
| 5.                       | (a)      |                                 | 3                           |                                   | 20          |
|                          | (b)      |                                 | 2                           |                                   |             |
|                          | (c) (i)  | 2                               |                             |                                   |             |
|                          | (c) (ii) |                                 | 1                           |                                   |             |
|                          | (d)      | 1                               | 1                           |                                   |             |
|                          | (e)      |                                 | 2                           |                                   |             |
|                          | (f)      |                                 |                             | 3                                 |             |
| (g) (i)                  | 2        |                                 |                             |                                   |             |
|                          | (g) (ii) | 1                               | 2                           |                                   |             |
| <b>Profile for paper</b> |          | 46<br>46%                       | 51<br>51%                   | 3<br>3%                           | 100<br>100% |