

A-LEVEL

Psychology (Specification B)

PSYB1/Unit 1 Introducing Psychology

Mark scheme

Specification 2185

June 2015

Version 1.0: Final

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

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

Further copies of this Mark Scheme are available from aqa.org.uk

Section A Key Approaches and Biopsychology

1 (a) The following statements relate to the biological approach. Two of these statements are false.

Identify the **two** statements that are **false** by ticking the appropriate boxes.

[2 marks]

[AO1 = 2 marks]

FALSE	
The parasympathetic division of the autonomic nervous system slows down digestion.	✓
PET scans can only provide 2-dimensional (2D) information about the brain.	✓

1 (b) Use your knowledge of social learning theory to explain Alfie's behaviour.

[4 marks]

[AO2 = 4 marks]

Expect reference to some of the following SLT concepts:

- This is **observational learning**.
- This is **modelling** - Sally shouting at Jake when he is naughty/Alfie copying Sally's behaviour
- Sally is a **role model** for Alfie
- Alfie sees Sally get what she wants (is **positively reinforced**) by shouting - this acts as **vicarious reinforcement** for Alfie
- Alfie **imitates** the behaviour he has seen at home when he is in school as he expects the same reward – other children will now do what he wants.
- Alfie has **indirectly learned** the behaviour of shouting at others to get what you want in a social context.
- Alfie has **identified** with Sally.
- Reference to **mediating cognitive factors** eg attention, retention, motivation, motor reproduction.

Mark Bands

3 – 4 marks Knowledge of features of SLT is clear and mostly well-detailed. Links between Alfie's behaviour and SLT concepts are effective. The answer is coherent and terminology is used appropriately.

1 – 2 marks Knowledge of feature(s) of SLT is present. There is a link to Alfie's behaviour. The answer may lack clarity in places.

OR

Knowledge of features of SLT is at the level required for 3/4 marks but there is no application to Alfie's behaviours.

0 marks **No relevant content**

1 (c) (i) Identify the experimental design used in this study.

[1 mark]

[AO3 = 1 mark]

One mark for independent groups/independent measures/unrelated design.

1 (c) (ii) Explain how the psychologist could have randomly allocated the participants to the two conditions of this study.

[3 marks]

[AO3 = 3 marks]

Up to 3 marks for a practical description of the procedure of random allocation as it would be applied in this study – 1 mark per bullet:

- The names of **all 20** participants could be put in a container
- 10 names are drawn out and these participants are allocated to Condition A
- The remaining 10 participants are allocated to Condition B

Or names can be drawn and allocated alternately.

Descriptions in which participants draw a letter from a container containing 10 As and 10 Bs and the letter determines the condition in which they participate are appropriate.

Computer selection: Up to 3 marks for a practical description of the procedure of random allocation as it would be applied in this study – 1 mark per bullet

- She assigns each of the 20 participants a number between 1 and 20.
- She then uses the program to generate 10 numbers at random between 1 and 20
- The people with these 10 numbers go in Condition A, the remainder in Condition B.

Accept other valid and practical suggestions.

1 (d) Describe and evaluate the cognitive approach in psychology.

[10 marks]

[AO1 = 5 marks; AO2 = 5 marks]

Examiners must read the whole response prior to marking in order to make a band judgement about whether the response is Very good (9-10 marks), Good (6-8 marks), Average to weak (3-5 marks) or Poor (1-2 marks). Examiners should be guided by the band judgement when annotating the script.

AO1 Up to 5 marks for knowledge of features and/or assumptions of the cognitive approach. These might include: the requirement that cognitive processes must be studied if human behaviour is to be understood; mental processes mediate between the stimulus and response; human information processing is analogous to the way a computer works – input, storage and retrieval systems, hardware and software; the use of models to explain internal/mental processes; proposals of stage-based processing; the process of inference; the expectation that human behaviour should be studied scientifically (control, cause and effect, replication etc).

Credit description of models to illustrate features – max 1 mark

Credit description of evidence – 1 mark

AO2 Up to 5 marks for evaluation of the cognitive approach. Likely strengths of the approach: the reliance on scientific procedures to establish reliability when testing theories. The use of laboratory based experiments and the value of these. How models help to make mental processes more testable and provide descriptions of unseen processes. Practical applications, such as in therapy, the efficacy of these; the value of using human participants rather than animal research; expect reference to the study of learning and/or animal research and comparisons with the behaviourist and SLT approaches.

Credit reference to how the cognitive approach combines with other approaches in explaining and treating disorders.

Likely limitations of the approach: how artificiality of the scientific/experimental situation might affect validity; lack of focus on emotional aspects of human behaviour; crude comparison of the computer analogy and the mechanistic view this proposes.

Credit contrast with other approaches where the relevance to evaluation of the cognitive approach is made clear.

Credit use of evidence to evaluate the cognitive approach.

Mark Bands

9 – 10 marks **Very good answers**

There is mostly accurate, well-organised and detailed description of the features of the cognitive approach showing sound knowledge. The evaluation is mostly clear and coherent. The answer is well focused with little or no misunderstanding. Evaluative points are elaborated rather than stated.

The answer is well structured with effective use of paragraphs, sentences and psychological terminology. There are few errors of spelling and punctuation.

6 – 8 marks **Good answers**

There is mostly accurate description of the cognitive approach showing knowledge of some of the features of the approach. There is evaluation of the approach. Some evaluative points are well developed although some points may be stated rather than discussed. The answer is mostly focused on the question, shows some organisation although there may be some misunderstanding.

The answer has some structure with appropriate use of paragraphs, sentences and psychological terminology. There are some errors of spelling and punctuation.

3 – 5 marks **Average to weak answer**

There is knowledge of the cognitive approach and/or basic/limited evaluation of the approach. The answer may lack balance between description and evaluation. The answer may lack focus. There may be substantial inaccuracy and/or irrelevance at the bottom of the band.

Some basic ideas are expressed adequately though the answer may lack structure. Psychological terminology may be missing or used inappropriately. There may be some intrusive errors of grammar, spelling or punctuation.

1 – 2 marks **Poor answer**

There is extremely limited knowledge of the cognitive approach and/or evaluation of the approach. There must be some relevant information.

Basic ideas are poorly expressed. There is little evidence of structure. There may be many errors in grammar, spelling and punctuation.

0 marks **No relevant content**

Section B Gender Development

2 (a) Two of the following statements about gender are true.

Identify the **two** statements that are **true** by ticking the appropriate boxes.

[2 marks]

[AO1 = 2 marks]

TRUE	
Nurture refers to the influence of external factors on gender development.	✓
The chromosome pattern found in Turner's syndrome is characterised by a single X chromosome.	✓

2 (b) Suggest the stage of development shown in **Response A** and the stage of development shown in **Response B**. In each case, explain your answer.

[4 marks]

[AO1 = 2 marks; AO2 = 2 marks]

Response A: gender identity. Explanation: the child does not understand gender/sex is fixed (she thinks she can be a daddy when she grows up)

Response B: gender constancy/consistency. Explanation: the boy knows sex/gender is fixed for everyone **OR** fixed irrespective of context and appearance.

For the explanation mark the student must go beyond the stem – ie do not accept simple repetition of the children's responses.

2 (c) Outline **one** possible methodological issue that might occur when researchers have to categorise the answers that young children give in a study.

[2 marks]

[AO3 = 2 marks]

One mark for relevant reference to issue of categorisation

One mark for relevant reference to issue of using young children

Two-mark answers must combine the above two points.

Possible problems:

- subjectivity/researcher bias involved in categorising the ambiguous responses of a young child – affects either reliability, validity or both
- child's limited ability to understand/communicate/articulate might affect researcher's decisions re categorisation
- assuming performance equals competence – child's answer may not reflect true ability – affects validity of category

2 (d) Briefly explain **one** ethical issue that often arises when asking young children questions about their understanding of gender development.

[2 marks]

[AO3 = 2 marks]

Two marks for a clear and coherent brief explanation of an ethical issue relevant to asking young children about gender development.

1 mark for a brief explanation that is vague and/or muddled but relevant to asking young children about gender development.

Likely issues: consent due to age and the need for parental involvement; protection of welfare – some studies have involved exposure to genitals of characters in a picture.

Note ethical issues may overlap, so should award credit to the benefit of the candidate.

No marks for identification of an ethical issue.

2 (e) Describe and evaluate Freud's psychoanalytic explanation of gender development **and** a biological explanation of gender development. **[10 marks]**

Examiners must read the whole response prior to marking in order to make a band judgement about whether the response is Very good (9-10 marks), Good (6-8 marks), Average to weak (3-5 marks) or Poor (1-2 marks). Examiners should be guided by the band judgement when annotating the script.

[AO1 = 5 marks; AO2 – 5 marks]

AO1 Credit knowledge of features and assumptions of **Freud's psychoanalytic** explanation that is relevant to gender development. Features might include: description of the stage theory of gender development – focus must be on the phallic stage; the Oedipus and Electra complexes; the role of the unconscious; the role of parents; identification process involving internalisation of same-sex parent's behaviours.

Credit knowledge of feature and assumptions of **a biological** explanation of gender development. This might include reference to typical and atypical chromosome patterns; or the impact of hormones such as androgens and oestrogens; role of evolution; neural mechanisms eg SDN.

Credit description of relevant evidence/studies – 1 mark

AO2 Credit for evaluation of Freud's psychoanalytic theory of gender development and the biological explanation presented.

Likely points, which must be evaluative rather than just statements: the explanation derives from concepts that are largely untestable – the unconscious conflicts in the phallic stage, unconscious use of defence mechanisms as in the case of Little Hans' phobia; the requirement of a same-sex parent for the process of identification – Malinowski 1929 Trobriand Islander study.

Credit for evaluation of the chosen biological explanation which is likely to use relevant evidence as support for the points made, (eg Van Goozen 1995, Tricker 1996, Dabbs 1995 and case studies such as David Reimer), and to refer to the advantages of the scientific nature of the research.

Credit comparisons of psychoanalytic explanations of gender and/or a biological explanation with alternatives – expected to be those looking at the impact of social or other environmental factors.

Credit use of evidence.

Maximum 6 marks if only one explanation presented

Mark Bands

9 – 10 marks Very good answers

There is mostly accurate, well-organised and detailed description of some of the features of the psychoanalytic explanation and of a biological explanation of gender. The evaluation is mostly clear and coherent. The answer is well focused with little or no misunderstanding. Evaluative points are elaborated rather than stated.

The answer is well structured with effective use of paragraphs, sentences and psychological terminology. There are few errors of spelling and punctuation.

6 – 8 marks Good answers

There is mostly accurate description of the psychoanalytic explanation of gender development and the chosen biological explanation showing knowledge of some of the features of both. There is some evaluation of these explanation(s). Some evaluative points are well developed although some points may be stated rather than discussed. The answer is mostly focused on gender, shows some organisation although there may be some misunderstanding.

The answer has some structure with appropriate use of paragraphs, sentences and psychological terminology. There are some errors of spelling and punctuation.

3 – 5 marks Average to weak answer

There is some knowledge of the psychoanalytic and/or biological explanation(s) of gender development and/or basic/limited evaluation of these explanation(s). The answer may lack focus on gender and may be unbalanced. There may be substantial inaccuracy and/or irrelevance at the bottom of the band.

Some basic ideas are expressed adequately though the answer may lack structure. Psychological terminology may be missing or used inappropriately. There may be some intrusive errors of grammar, spelling or punctuation.

1 – 2 marks Poor answer

There is extremely limited knowledge of the required explanation(s) and/or evaluation of these. There must be some relevant information.

Basic ideas are poorly expressed. There is little evidence of structure. There may be many errors in grammar, spelling and punctuation.

0 marks No relevant content

Section C Research Methods

3 (a) Write a suitable hypothesis for this study.

[2 marks]

[AO3 = 2 marks]

2 marks for a clear, appropriate hypothesis with both variables operationalised and reference to relationship/correlation/association.

1 mark for a correlational hypothesis with one or both variables not operationalised.

1 mark for a correlational hypothesis with both variables operationalised which includes the phrase 'more likely'.

No marks for a hypothesis that refers to a difference between two conditions.

Possible answer:

Non-directional: There is a relationship between the number of (recreational) hours spent on a computer and the psychological health score.

Accept a directional hypothesis that predicts a negative correlation as this is suggested by the 'recent reports'.

Accept null version of the hypothesis.

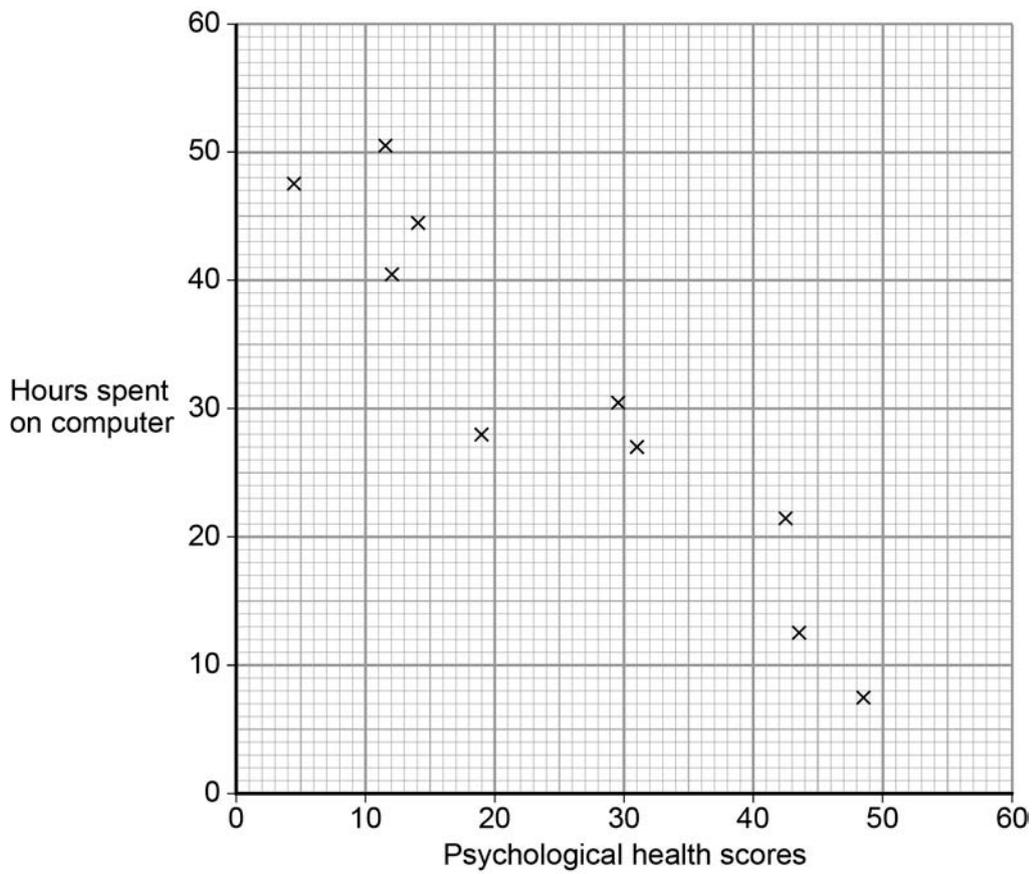
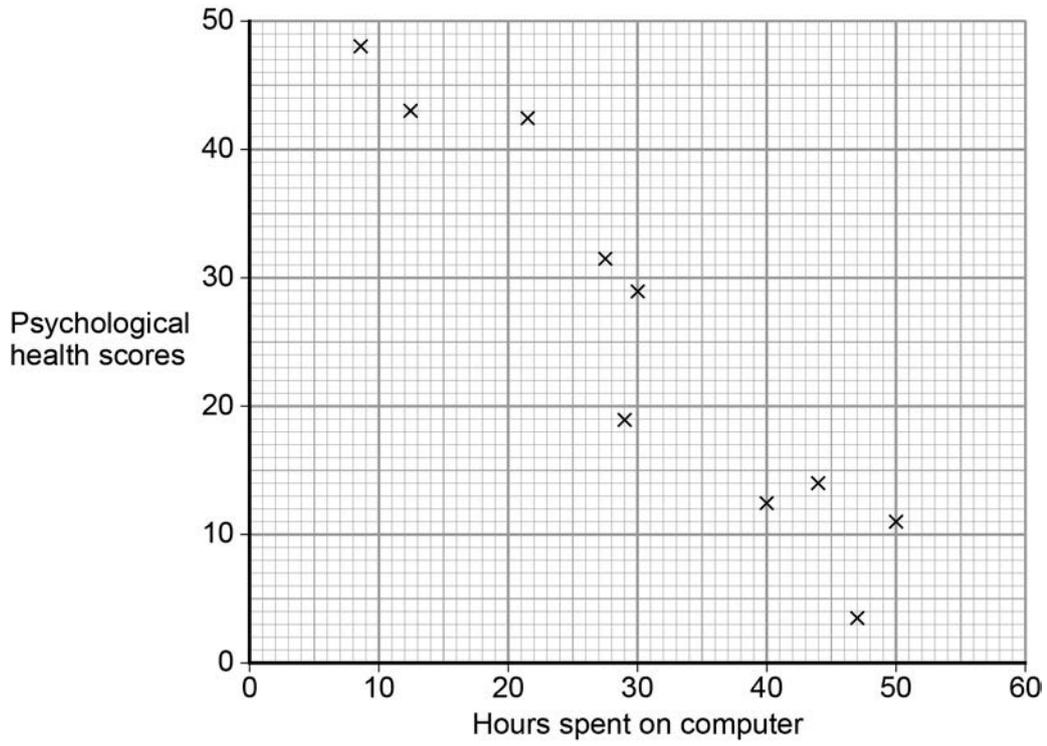
3 (b) Using the data given in **Table 1** opposite, sketch an appropriate graphical display of the data and label the axes. Use the graph paper below. You do not need to provide a title.

[3 marks]

[AO3 = 3 marks]

1 mark for each bullet:

- correct labelling of x and y axis
- appropriate scaling of x and y axis
- plotting which produces correct pattern of data
(including line of best fit is acceptable but joining each point is not acceptable for final bullet point)



3 (c) What relationship is shown in the graphical display you have drawn in your answer to question **3 (b)**? Explain your answer.

[2 marks]

[AO3 = 2 marks]

Negative (or strong) relationship/correlation (1) because as the value of one variable (time spent on computer) increases so the value of the other variable (psychological health score) decreases (1). Or vice versa.

3 (d) Why would it be inappropriate for the researcher to conclude that computer activities such as playing video games have an effect on psychological health?

[2 marks]

[AO3 = 2 marks]

Up to 2 marks

Award 1 mark for each appropriate reason eg no cause and effect, no manipulation of variables, no control, not an experiment, study is not investigating differences.

OR

2 marks for one reason fully elaborated/explained

Do not accept simple statement 'it is only a correlation'.

3 (e) The participants reported the amount of time they spent using computers for one week. Briefly explain **one** problem that might have occurred because of this self-report method of data collection.

[2 marks]

[AO3 = 2 marks]

1 mark for stating a relevant problem, eg self-reporting of own time may be subjective/ may not be objective/reliable; students may give socially desirable answers (lie); students may recall inaccurately; distinction between academic and recreational time is open to interpretation.

Plus one further mark for clear explanation/elaboration/expansion of how/why this is a problem, eg affecting reliability or validity, or effect on results/outcome.

3 (f) The online questionnaire about psychological health contained a number of open and closed questions. Explain **one** advantage of using open questions in a questionnaire.

[2 marks]

[AO3 = 2 marks]

1 mark for giving a brief explanation of relevant advantage.

1 further mark for explanation/elaboration of how or why it is an advantage.

Likely 2-mark answers:

- Open questions allow the respondent to provide extra detail/in depth information/qualitative information/rich information (1) and explanations for their answer(s) which might help the researcher understand the answer(s) given (1).
- Open questions might provide the researcher with new lines of enquiry (1) by bringing to his/her attention additional information to include in the questionnaire (1).
- Open questions might lead to greater validity (1) as respondents have a greater opportunity to present their true feelings (1).

3 (g) The researcher decided to interview the participants whose psychological health score was below 25. He chose to use a structured interview. Outline **one** limitation of this type of interview.

[2 marks]

[AO3 = 2 marks]

1 mark for a brief outline of a limitation.

Plus further mark for elaboration of how or why it is a limitation.

Likely 2-mark answers:

- The researcher cannot ask a supplementary/follow-up question (1) so any unexpected issues cannot be investigated further (1).
- The respondent might become frustrated with the fixed questions (1) as he/she cannot expand/elaborate further (1).
- The respondent cannot expand on any issues (1), because all the questions are fixed before the start (1).

Straightforward definition of a structured interview – no marks

Accept other valid limitations as long as these focus on the **type of interview** and **not the type of question** as a structured interview can contain both open and closed questions.

3 (h) At the end of the study, the researcher debriefed the participants. Write a debriefing that could have been read out to all the participants in the study.

[3 marks]

[AO3 = 3 marks]

For 3 marks the debriefing **must** include the following information in a clear, coherent verbatim form:

For 2 marks both bullet points in verbatim form but answer is not completely clear OR one bullet point clearly expressed and in verbatim form.

For 1 mark one/both points addressed but the answer lacks clarity.

- The purpose of the study – to see if there is a relationship between the amount of time spent using a computer for non-academic purposes and psychological health
- Reference to ethics such as – right to withdraw data or be informed of results or check of welfare, (general attempts showing respect for the participants eg thanking/access to results/ any questions?).

Maximum 1 mark if not verbatim format.

3 (i) Explain **one** reason why researchers often conduct a pilot study.

[2 marks]

[AO3 = 2 marks]

1 mark for providing a reason and a further mark for explanation/expansion/elaboration of that reason.

Likely reasons (these could overlap):

- To ensure that aspects of the design of the study are tested.
- So that time is not wasted in the final investigation.
- Checking the wording of questions.
- Checking instructions.

ASSESSMENT OBJECTIVES GRID

Question	AO1	AO2	AO3
1a	2		
1b		4	
1c(i)			1
1c(ii)			3
1d	5	5	
2a	2		
2b	2	2	
2c			2
2d			2
2e	5	5	
3a			2
3b			3
3c			2
3d			2
3e			2
3f			2
3g			2
3h			2
3i			3
Total	16	16	28

UMS conversion calculator www.aqa.org.uk/umsconversion