



ASSESSMENT and  
QUALIFICATIONS  
ALLIANCE

# Mark scheme

# June 2003

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## GCSE

### Psychology

3181

### Foundation

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**The assessment of spelling, punctuation and grammar.**

For each written component 5 per cent of the total marks available must be allocated to spelling, punctuation and grammar according to the criteria below.

<b>Threshold performance</b>	Candidates spell, punctuate and use the rules of grammar with reasonable accuracy; they use a limited range of specialist terms appropriately.	<b>1 mark</b>
<b>Intermediate performance</b>	Candidates spell, punctuate and use the rules of grammar with considerable accuracy; they use a good range of specialist terms with facility.	<b>2-3 marks</b>
<b>High performance</b>	Candidates spell, punctuate and use the rules of grammar with almost faultless accuracy, deploying a range of grammatical constructions; they use a wide range of specialist terms adeptly and with precision.	<b>4-5 marks</b>

**SECTION A – COGNITIVE PSYCHOLOGY****1****Total for this question: 30 marks**

(a) Write a suitable hypothesis for this experiment.

(2 marks)

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

The hypothesis must be a testable statement, e.g. ‘Football fans can remember scores more accurately than people who don’t like football.’ The sense of the two variables should be present. Statement **1 mark**, variables **1 mark**.

(b) Identify the experimental design used by placing a tick in the correct box below.

Independent measures

Repeated measures

Matched pairs

(1 mark)

**[1 mark: AO1 = 1]**

Independent measures (**1 mark**).

(c) (i) Identify the sampling method used in this experiment.

(1 mark)

**[1 mark: AO1 = 1]**

Opportunity sampling (allow convenience) (**1 mark**).

**Note:** Do not allow ‘volunteers’.

(ii) State **one** advantage of using the sampling method you have identified in (i) above.

(1 mark)

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

Any valid statement of an advantage receives 1 mark, e.g. It is the easiest method of obtaining participants (**1 mark**).

- (d) Explain what the findings in **Table 1** tell you about the accuracy of recall of fans and non-fans in remembering football results. *(4 marks)*

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

The answer should focus on the accuracy of both groups of fans rather than offering reasons for the differences in scores. The mean scores tell us that football fans do remember results more accurately than non-fans because their mean score was 14 compared with 6 from the other group. The ranges tell us that in both groups there was a very wide spread of scores. Both groups must have contained people who scored maximum and people who didn't score above 1. The trend was for the fans to do better.

**To 4 marks as follows**

**4-3 marks** Clear explanation referring to both groups of fans, using the numbers in the table.

**2-1 marks** Limited explanation, referring to only one group or reference only to data.

- (e) Imagine that a friend of yours who does not study psychology is preparing for her GCSE examinations. She has asked for your advice on how to improve her memory. Use your knowledge of psychology to explain **one** method that she could try. *(4 marks)*

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

There are many applications derived from the explanations of memory. Answers may or may not contain research evidence (the question doesn't require this). However a recognisable application should be clearly explained. For example, the levels of processing approach suggests that processing information semantically (for meaning) increases the chances of recalling it. Therefore in preparing for examinations, material should first be read, then without looking, try to write what you read in your own words. Then check to see if what you have written is correct. AO1 marks are for recalling an appropriate theory whilst AO2 marks are for applying the theory to the situation contained in the question, i.e. preparing for an examination.

**To 4 marks as follows**

**4-3 marks** Clear explanation of theory or research and application, reflecting the amount of detail contained in the mark scheme.

**2-1 marks** At the bottom end, a recognised theory/research will be stated or a limited attempt at application will be stated. At the top end there will be a better attempt at either theory or application or a muddled combination of both.

**Note:** If more than one technique is offered, credit will be given to the best explanation only.

(f) Identify the type of visual illusion that is shown in **Picture 1** by placing a tick in the correct box below.

- Ambiguity
- Distortion
- Paradox
- Fiction

(1 mark)

[1 mark: AO1 = 1]

The illusion is a ‘distortion’ (1 mark).

(g) Read each of the following statements and decide if they are **TRUE** or **FALSE**. Write either **TRUE** or **FALSE** on the line next to each statement.

- (i) “Height in plane” is an example of a monocular depth cue. (1 mark)
- (ii) You can judge distance just as easily with one eye as with both eyes. (1 mark)
- (iii) “Relative size” is an example of a binocular depth cue. (1 mark)

[3 marks: AO1 = 3]

- (i) TRUE (1 mark).
- (ii) FALSE (1 mark).
- (iii) FALSE (1 mark).

(h) Use your knowledge of psychology to explain **one** visual illusion that can happen in everyday life. (3 marks)

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

To receive any credit at all, the visual illusion explained must be taken from everyday life. An example which could be offered is the moon illusion, where the distortion is clearly visible. It could be explained by the inappropriate use of depth cues provided by a close horizon. Another example could simply be looking at a picture and having an impression of three dimensions because of monocular depth cues.

**To 3 marks as follows**

**3 marks** A visual illusion that can happen in everyday life is identified and clearly explained.

**2-1 marks** At the lower end, a visual illusion from everyday life is stated. At the upper end, a brief or muddled explanation is offered.

- (i) Describe **one** study in which **either** perceptual defence **or** sensitisation was investigated. Indicate in your answer the method used, the results obtained and the conclusion drawn. (4 marks)

[4 marks: AO1 = 4]

The most likely study to be offered for perceptual defence is from McGuinnies. For perceptual sensitisation, Eriksen could be offered.

To 4 marks as follows

**4-3 marks** The study is clearly recognisable and the description contains all three elements required by the question. At the top end, description is detailed.

**2-1 marks** The outline of a recognisable study is given but it does not contain all the elements required by the question or the description is muddled.

- (j) The psychologist in the advertisement will use a special drug which causes smokers to feel ill and vomit. The smokers will take this drug every time they smoke a cigarette.

Put the following terms into the boxes below to show how the treatment works.

*Unconditioned Stimulus (UCS)*

*Conditioned Response (CR)*

*Unconditioned Response (UCR)*

*Conditioned Stimulus (CS)*

(3 marks)

[3 marks: AO1 = 3]

UCS  $\implies$  UCR

CS  $\implies$  CR

If one correct **1 mark**, if two correct **2 marks**, four correct **3 marks**.

- (ii) Explain why this treatment should cause the patient to stop smoking. (2 marks)

[2 marks: AO2 = 2]

The explanation should centre on how an association is built up between the UCS and the CS (1 mark).

The patient eventually associates cigarettes with the thought of feeling ill and kicks the habit (1 mark).

(k) State <b>one</b> criticism of using conditioning methods to change behaviour. <span style="float: right;"><i>(1 mark)</i></span>
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**[1 mark: AO2 = 1]**

Any valid criticism stated will earn 1 mark. One of the most obvious criticisms is probably that this type of treatment does not deal with the cause of the behaviour (**1 mark**). Credit should also be given to any criticism of an ethical nature.

**SECTION B – SOCIAL PSYCHOLOGY****2****Total for this question: 30 marks**

(a) What is meant by the term *stereotype*? Refer to the article in your answer. (3 marks)

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

A stereotype is a belief about an individual because of their membership of a group which is defined solely by a superficial feature. In the case of the article, the feature is the mode of dress (although some candidates might refer to skin colour).

**To 3 marks as follows**

**3 marks** Clear definition with relevant reference to the article.

**2-1 marks** Brief definition with relevant reference to article or clear definition without reference to article at top end. Brief definition at lower end.

(b) Outline **one** advantage and **one** disadvantage that the use of stereotypes might have in everyday life. (4 marks)

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

Advantage stated (**1 mark**), expanded (**1 mark**), eg it enables us to respond rapidly to situations (1) because we may have had similar experiences before (1)

Disadvantage stated (**1 mark**), expanded (**1 mark**), eg it makes us ignore differences between individuals (1), therefore we think things about people that might not be true (1).

(c) Describe **one** study in which stereotyping was investigated. Include in your answer the reason why the study was conducted, the method used, the results obtained and the conclusion drawn. (5 marks)

**[5 marks: AO1 = 5]**

There are numerous studies which are appropriate here, for example Katz & Braly, Gahagan, Word, etc.

**To 5 marks as follows**

**5-4 marks** The study is clearly recognisable and the description contains all four elements required by the question. At the top end, description is detailed.

**3-1 marks** The outline of a recognisable study is given but it does not contain all the elements required by the question.



(d) Define the term *prejudice*. (3 marks)

**[3 marks: AO1 = 3]**

Prejudice is an extreme attitude, either positive or negative towards a group or individual based on limited information. Answers might include implicitly or explicitly references to cognitive, affective and behavioural components.

**To 3 marks as follows**

**3 marks** Clear definition incorporating at least three of the elements contained in the mark scheme.

**2-1 marks** Brief definition containing at least one of the elements mentioned in the mark scheme.

(e) Explain **one** way by which psychologists have suggested prejudice might be reduced. (3 marks)

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

Several ways to reduce prejudice could be explained. These include changing individual factors, increasing contact, co-operation, etc.

**To 3 marks as follows**

**3 marks** The way has been clearly identified either explicitly or implicitly through thorough explanation.

**2-1 marks** Identification of a way to reduce prejudice with little or no explanation.

(f) Describe the results of the study. (3 marks)

**[3 marks: AO1 = 3]**

In condition A, approx 85% of participants went for help. In condition B it was approx 60%, whilst in condition C, it was approx 30%.

**To 3 marks as follows**

**3 marks** Results from all 3 conditions must be described.

**2-1 marks** Partial description of results

(g) Use your knowledge of psychology to explain the results of this study. (4 marks)

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

The results show that people are more likely to go for help when they are on their own. Answers may focus on ‘diffusion of responsibility’ and/or ‘pluralistic ignorance’, explaining how these processes can account for the differences in the results. There could also be reference made to defining the situation as an emergency in the first place.

To 4 marks as follows

**4-3 marks** Full explanation linked to the results of the study incorporating most of the issues mentioned in the mark scheme.

**2-1 marks** Limited explanation of how people tend to behave in such situations. Direct link to the study may not be made.

(h) Identify **one** ethical issue which should have been considered when this study was designed. Explain why the issue you have identified is important. (3 marks)

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

The ethical issue identified must be relevant to this particular study. There are many to choose from including deception, distress to the participant, etc. For full marks, the explanation should be linked to the study.

To 3 marks as follows

**3 marks** A relevant ethical issue has been clearly identified with a thorough explanation linked to the study.

**2-1 marks** Identification or limited explanation of an issue.

(i) Using your knowledge of psychology, describe **one** everyday situation in which the presence of others could affect the behaviour of an individual. (2 marks)

[2 marks: AO2 = 2]

This question requires candidates to use information to examine an issue i.e. behaviour in the real world (AO2 skill). Answers do not necessarily have to relate to emergency situations or bystander apathy. They merely have to show an awareness of how we are affected by others. If a situation is simply identified, 1 mark can be awarded. For example, children’s behaviour in the classroom can be affected by those around them (**1 mark**). A further mark for expansion, eg when others misbehave we tend to join in (**1 mark**).

## SECTION C – DEVELOPMENTAL PSYCHOLOGY

3

Total for this question: 30 marks

- (a) Choose the words from the following list which match each definition and write the correct word in the box next to the definition.

assimilation  
 adaptation  
 accommodation  
 conservation

(3 marks)

[3 marks: AO1 = 3]

Accommodation  
 Assimilation  
 Adaptation

1 mark for each term correctly placed.

- (b) Complete the table below, writing the characteristics in the **correct boxes**. (3 marks)

[3 marks: AO1 = 3]

**Characteristic**

Children lack object permanence  
 Children show egocentrism  
 Children show conservation skills  
 Children are capable of inferential reasoning

1 mark for one correct, 2 marks for two correct, 3 marks for four correct.

- (c) Describe **one** study designed by Piaget to demonstrate *the pre-operational stage of development*. Include in your answer the reason why the study was conducted, the method used, the results obtained and the conclusion drawn. (5 marks)

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

Any relevant study based on Piagetian methods for the pre-operational stage is acceptable. The most likely contenders will be conservation, classification or egocentrism experiments. If the stated reason for the study is to compare two different age groups, full credit should be given even though it is not required. The reason could simply be for example, to investigate the conservation of number skills of five-year olds.

To 5 marks as follows

**5-4 marks** The study is clearly recognisable and the description contains all four elements required by the question. At the top end, description is detailed.

**3-1 marks** The outline of a recognisable study is given but it does not contain all the elements required by the question.

- (d) Explain **one** criticism of Piaget’s theory of intellectual development. Use psychological evidence in your answer. *(4 marks)*

**[4 marks: AO2 = 4]**

Answers will probably criticise Piaget’s methodology in conservation studies or the complexity of the three-mountains task. Evidence is most likely to come from McGarrigle or Hughes but, of course, other contributions could be equally valid. Only answers which offer evidence will qualify for the top band of marks. Evidence could be in the form of the results and conclusion of a study or the method and results of a study. If more than one criticism is offered, marks will be awarded for the best one.

**To 4 marks as follows**

- 4-3 marks**            A valid criticism is clearly explained with supporting evidence offered.
- 2-1 marks**            A valid criticism is clearly explained without supporting evidence or a brief or muddled attempt at offering a criticism and/or evidence.

- (e) The new manager of a nursery wants ideas about learning activities to use with young children. Use Piaget’s theory to identify and explain **one** activity the manager could introduce in the nursery. *(3 marks)*

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

The question requires knowledge of applications of Piagetian principles in working with young children. At the top end, there will be an awareness of providing opportunities for the child to interact with the environment, for example, for children to use their senses or for motor movement, etc. There may be reference to providing a range of difficulty in tasks to enable both assimilation and accommodation to take place or for discovery learning. Credit should be given to relevant examples, if used.

**To 3 marks as follows**

- 3 marks**            A clear explanation is given reflecting the spirit of the mark scheme. Examples may or may not be used.
- 2-1 marks**            A brief or muddled explanation but relevance to Piagetian principles is discernable.

(f) Define each of the following terms:

(i) *sex identity* (1 mark)

(ii) *gender identity* (1 mark)

[2 marks: AO1 = 2]

Sex identity being male or female which is a biological state (1 mark). Gender identity is understanding what it means to be male or female which is a psychological state (1 mark).

(g) Fill in the boxes below using the terms *testosterone*, *oestrogen*, *XY* and *XX*. (3 marks)

[3 marks: AO1 = 3]

Oestrogen  
XX  
XY  
Testosterone

1 mark for one correct, 2 marks for two correct, 3 marks for four correct.

(h) Suggest **one** behaviour category for each stereotype that you might use when recording your observations.

Masculine stereotype (1 mark)

Feminine stereotype (1 mark)

[2 marks: AO1 = 2]

Observable categories relating to masculine and feminine stereotypes should be suggested. 1 mark should be awarded for each.

(i) State **one** reason why it is necessary to use behaviour categories when recording behaviour. (1 mark)

[1 mark: AO1 = 1]

The statement should relate to objectivity. Behaviour categories allow us to quantify behaviour (1 mark). It is easier to record behaviour this way (1 mark). It allows us to focus on certain behaviours and ignore others (1 mark). **Maximum of 1 mark.**

(j) (i) What is meant by the term *inter-observer reliability*? (2 marks)

[2 marks: AO1 = 2]

Inter-observer reliability means that the measurement of behaviour is consistent between observers (2 marks).

(j) (ii) Explain how you and your partner could establish inter-observer reliability. (2 marks)

[2 marks: AO1 = 2]

To establish inter-observer reliability, both partners should observe the same behaviour independently and compare results afterwards. If the results are very similar, then inter-observer reliability has been established.

To 2 marks as follows

**2 marks** All the elements contained in the mark scheme will be clearly expressed.

**1 mark** A limited or muddled explanation is given.

**SECTION D – PRO- AND ANTI-SOCIAL BEHAVIOUR****4****Total for this question: 30 marks**

(a) What is meant by the term *moral behaviour*? (2 marks)

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

Moral behaviour is acting in accordance with acceptable rules and standards (1 mark) which are expected within a society (1 mark).

or

Implication of having reached level 6 (according to Kohlberg).

(b) Outline how Piaget's theory of moral development helps us to understand the behaviour of the convicted male criminals referred to in the article. (5 marks)

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

Piaget proposed that, up to the age of three or four, children are unable to make moral judgements because they do not understand the rules. They then go through two stages of moral development. In the first stage, rules are imposed by authority figures. Consequences of actions are important. In the second stage, rules can be flexible but intentions behind actions become important. The article is suggesting that the boys haven't reached the first stage.

**To 5 marks as follows**

**5-4 marks** The answer will reflect the detail of the mark scheme and will be clearly expressed. Reference to the article will be included.

**3-1 marks** The answer will be clearly expressed reflecting some of the detail of the mark scheme but without reference to the article or a brief or a muddled outline is given.

(c) Choose the word from the following list which matches each definition and write the correct word in the box next to the definition. (2 marks)

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

Altruism  
Empathy  
Pro-social

If one correct (1 mark), if three correct (2 marks).

(d) Use your knowledge of psychology to identify and explain **two** factors which affect pro-social behaviour.

**Factor one** (3 marks)

**Factor two** (3 marks)

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

The specification cites socialisation and social norms as two factors that must be covered in the course. However, there are other factors which are equally acceptable including the cost-reward factor, defining the situation as one where help is needed, ease or difficulty of escape from the helping situation, etc.

The mark scheme for **3 marks** is as follows because two factors are required. Each factor should be treated separately.

**To 3 marks as follows**

**3 marks** A relevant factor is identified and clearly explained.

**2-1 marks** A relevant factor is identified but explanation is limited at the top end. At the bottom end either a factor has been identified and/or the explanation is muddled.

(e) Read each of the following statements and decide if they are **TRUE** or **FALSE**. Write either **TRUE** or **FALSE** on the line next to each statement.

(i) Researchers who explain aggression through the study of animals in their natural environment are taking an *ethological* approach.

(ii) Researchers who explain aggression as an inherited trait are taking a *biological approach*. (2 marks)

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

(i) TRUE (1 mark)

(ii) TRUE (1 mark)



- (f) According to the social learning approach, aggressive behaviour is learned. Describe one study in which this idea was investigated. Indicate in your answer the method used, the results obtained and the conclusion drawn. (4 marks)

**[4 marks: AO1 = 4]**

The most obvious contender here is Bandura's Bobo doll experiment.

**To 4 marks as follows**

**4-3 marks** The study is clearly recognisable and the description contains all three elements required by the question. At the top end, description is detailed.

**2-1 marks** The outline of a recognisable study is given but it does not contain all the elements required by the question or the description is muddled.

- (g) Name and explain **one** ethical issue that researchers need to consider when they investigate aggression. (3 marks)

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

Any ethical issue stated which is relevant to the study of aggression, with further elaboration. For example, when working with children, parental consent should be obtained, because children are too young to give informed consent themselves.

**To 3 marks as follows**

**3 marks** Any relevant ethical issue is named and clearly explained.

**2-1 marks** Ethical issue is named and/or explanation is limited.

- (h) Two major approaches which have attempted to explain ways of reducing aggression are the *psychodynamic approach* and the *social learning approach*.

Describe **one** way to reduce aggression which has been suggested by each of these approaches.

**Psychodynamic** (3 marks)

**Social Learning** (3 marks)

**[6 marks: AO1 = 6]**

The psychodynamic approach suggests catharsis or letting off steam. Aggressive energy builds up in people until it is released in behaviour. Therefore people should find harmless ways of acting aggressively, for example playing sport.

The social learning approach suggests that people have a general tendency to imitate others. If so, then exposure to non-aggressive models should reduce aggressive behaviour. Or if people witnessed others being punished for aggressive acts, they are less likely to commit those acts themselves.

The mark scheme for **3 marks** is as follows because two descriptions are required. Each description should be treated separately.

**To 3 marks as follows**

**3 marks**                    The description will reflect the detail of the mark scheme and will be clearly expressed.

**2-1 marks**                A limited or muddled description is given.

**BREAKDOWN OF ASSESSMENT OBJECTIVES**

<b>QUESTION</b>	<b>AO1</b>	<b>AO2</b>
1. (a)		2
(b)	1	
(c) (i)	1	
(c) (ii)		1
(d)	2	2
(e)	2	2
(f)	1	
(g)	3	
(h)	1	2
(i)	4	
(j) (i)	3	
(j) (ii)		2
(k)		1
	<b>18</b>	<b>12</b>
2. (a)	2	1
(b)	2	2
(c)	5	
(d)	3	
(e)	2	1
(f)	3	
(g)	2	1
(h)	2	2
(i)		2
	<b>21</b>	<b>9</b>
3. (a)	3	
(b)	3	
(c)	3	2
(d)		4
(e)		3
(f)	2	
(g)	3	
(h)	2	
(i)	1	
(j) (i)	1	
(j) (ii)	3	
	<b>21</b>	<b>9</b>
4. (a)	2	
(b)	3	2
(c)	2	
(d)	4	2
(e)	2	
(f)	4	
(g)		3
(h)	6	
	<b>23</b>	<b>7</b>