

General Certificate of Secondary Education

Psychology 3181

3181/H Higher Tier

Mark Scheme

2005 examination - June series

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

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of candidates' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

3181/H

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.

Threshold performance	Candidates spell, punctuate and use the rules of grammar with reasonable accuracy; they use a limited range of specialist terms appropriately.	1 mark
Intermediate performance	Candidates spell, punctuate and use the rules of grammar with considerable accuracy; they use a good range of specialist terms with facility.	2-3 marks
High performance	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.	4-5 marks

SECTION A - COGNITIVE PSYCHOLOGY

1 Total for this question: 30 marks

(a) Use your knowledge of psychology to name and explain the type of visual illusion shown in **Figure 1**. (3 marks)

AO1

The type of illusion is an 'ambiguity'. Although there is only one retinal image, there are two equally possible interpretations. Ambiguous figures. One type of data. Allow Necker Cube. **AO1 = 3 marks**

To 3 marks as follows:

3 marks	Type of illusion named correctly with a clear explanation.
2-1 marks	Clear explanation without correct naming of the illusion, or illusion correctly named and/or brief or muddled explanation.

(b) (i) Identify one factor that affects perception. (1
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The most likely factors will be motivation, perceptual set, previous experience, context and emotion. AO1 = 1 mark

(ii) Describe **one** study in which the factor you have identified in (b) (i) was investigated. Include in your answer the method used, the results obtained and the conclusion drawn.

(4 marks)

Depending upon the factor identified, possible studies could come from Gilchrist & Nesburg, Fisher, Solley & Haigh, Bruner & Postman, Bruner & Mintern. If (b) (i) and (b) (ii) are different, credit (b) (ii) only (if appropriate).

AO1 = 4 marks

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.

(iii) Discuss how the factor you have identified in (b) (i) might relate to everyday life.

As the question says 'discuss', critical commentary should be included in the answer to this question. For example, in the case of context, if we see someone in the distance, we may perceive that person to be someone we know. This is more likely to happen in the context of our neighbourhood rather than in a strange place. However, in everyday life, other factors might influence our perceptions of people we see too, unlike in controlled experimental situations.

AO2 = 3 marks

To 3 marks as follows:

3 marks	The answer is clearly expressed including critical comment reflecting the detail of the mark scheme.
2-1 marks	A clearly expressed answer but without critical comment or a brief or muddled discussion.

(c) Using an example, outline how the principles of *social learning* can be used to explain the development of behaviour.

(4 marks)

AO1

The principles of social learning in the development of behaviour are that observation, imitation and reinforcement are key features. Children learn by observing others and are more likely to imitate models who are important to them because they are caring, such as a parent.

AO₂

For example, a little girl who scrapes her knee observes how her mother behaves. Later the child may treat her teddy the same way by sticking a plaster on its knee and cuddling it.

AO1 = 3 marks AO2 = 1 mark

To 4 marks as follows:

4-3 marks	Clear psychological outline with an example reflecting the detail of the mark scheme. Not all key features required for max marks when features are elaborated.
2-1 marks	Outline which is brief but accurate at the top end or muddled at the bottom end. An example may or may not be used.

(d) Write a suitable hypothesis for this experiment. (2 marks)

The hypothesis must be a testable statement, e.g. 'Words that are easy to visualise will be remembered better than words that are difficult to visualise.' The sense of the two variables should be present. Statement (1 mark), variables (1 mark).

AO2 = 2 marks.

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

Repeated measures.

AO1 = 1 mark

(ii) Explain **one** advantage of the experimental design you have identified in (e) (i). (2 marks)

Advantage stated (1 mark), explained (1 mark) e.g. it controls for participant variables (1 mark), therefore we do not have to worry about differences in participants' abilities having an affect on the results in either condition (1 mark). $AO1 = 1 \text{ mark} \quad AO2 = 1 \text{ mark}$

(f) (i) For each condition, calculate the mean score and complete **Table 2** below. (2 marks)

Condition A = 11

Condition B = 7 AO2 = 2 marks

(ii) Use the graph paper below to display the means you have calculated for **Table 2**. Provide a suitable title for this graph and fully label your display. (5 marks)

AO₂

The graph must have an informative title, the display must be appropriate (i.e. a bar graph), both axes must be clearly labelled and the graph must be plotted accurately.

To 5 marks as follows:

5-4 marks	At the top end, all five elements contained in the mark scheme will be present.
3-1 marks	More than one of the elements contained in the mark scheme will be missing.

Note: An inappropriate display will receive a maximum of 1 mark (if there is an informative title).

(g) Use your knowledge of psychology to discuss whether the results of this experiment can be explained by the *process of encoding*. (3 marks)

AO2

As the question says 'discuss', critical judgement should be included in the answer to this question. The results of the experiment suggest that words that are easy to visualise could have been visually encoded (changed into a visual image) and stored more successfully, or words that were difficult to visualise were harder to encode and not remembered so well. However, there could be other factors that made the words in Condition B harder to remember. For example, they could have been less common than the words in Condition A.

AO2 = 3 marks

Note: Answers can say yes/no, but only with clear justification.

To 3 marks as follows:

3-2 marks	The answer is clearly expressed including critical judgement reflecting the detail of the mark scheme.
1 mark	A clearly expressed answer but without critical judgement or a brief or muddled discussion.

SECTION B - SOCIAL PSYCHOLOGY

Total for this question: 30 marks

(a) Distinguish between *central traits* and *peripheral traits*. Refer to the above conversation in your answer. (4 marks)

AO1

Central traits are personality traits which have a powerful influence on the impression we form of people whereas peripheral traits are personality traits that have less impact on people's impressions of others. Central traits are warm and cold. Peripheral traits are polite and blunt.

AO₂

In the conversation, Ali said that Mr Solomon had warmth. 'Warm' is a central trait which may have affected Melissa's impression of him. Ali said the other teachers were polite. 'Polite' is a peripheral trait which does not affect our impressions as much.

AO1 = 2 marks AO2 = 2 marks

To 4 marks as follows:

4-3 marks	Clear distinction is made between the two terms with reference to the conversation reflecting the amount of detail contained in the mark scheme.
2-1 marks	Clear distinction is made between the two terms but without reference to the conversation or the distinction is brief or muddled. Maximum of 2 marks if no reference to conversation.

(b) Describe and evaluate **one** study in which impression formation was investigated. Include in your answer the reason why the study was conducted, the method used, the results obtained, the conclusion drawn and an evaluation of the study described. (8 marks)

AO1

There are many studies of impression formation to choose from. The most likely contenders will be Asch (central & peripheral traits – this would not be a repetition of (a) as a description and evaluation of the study was not required in that part of the question) and Luchins (primacy & recency effect).

AO₂

Evaluation in the case of Asch could include the fact that participants were required to form an impression of an imaginary person and therefore was a rather artificial situation. However, Kelley did find that warm/cold does affect our impressions of others in real life which suggests that Asch's experiment was valid. AO1 = 5 marks AO2 = 3 marks

To 8 marks as follows:

8-6 marks	The study is clearly recognisable and the description contains all four elements required by the question. An attempt at evaluation is made which, at the top end could be one elaborated point or more than one evaluative comment but in less detail.
5-4 marks	The study is clearly recognisable and the description contains all four elements required by the question but no evaluation is offered or the description of the study lacks detail and an attempt at evaluation is made.
3-1 marks	The outline of a recognisable study is given but it does not contain all the elements required by the question. There may or may not be an evaluation attempt.

(c) What is meant by the term *conformity*?

(2 marks)

Conformity is yielding to the (perceived) (1 mark) pressure of group members (1 mark) even though no-one tells us to do so (1 mark). Accept changing behaviour to fit in with the people around you.

Max: 2 marks AO1 = 2 marks

(d) Identify and explain **two** factors that affect conformity. Refer to psychological research in your answer. (8 marks)

AO1

Factors affecting conformity include group size, lack of unanimity, anonymity, ambiguity and cultural context. The question asks for reference to psychological research to be included in the answer. This could be taken from the method and/or the results of a relevant study and a conclusion. For example, group size. In Asch's study when only one stooge was present, conformity was very low, but when three or more stooges were present, conformity rose to 32%. So people are more likely to conform when in larger groups.

Lack of unanimity. When one of the stooges in Asch's study gave a different answer from the others, conformity dropped. This was even true when the other person's answer was wrong. This indicates that one other person only has to disagree for an individual to be less likely to conform.

AO1 = 8 marks

The mark scheme for 4 marks is as follows because two explanations are required. Each explanation should be treated separately and the marks then added together. Maximum of 3 marks for each explanation when no research is offered.

To 4 marks as follows:

4-3 marks	Factor identified with a clear explanation reflecting the detail of the mark scheme.	
2-1 marks	Factor identified and explanation is brief but accurate at the top end. Explanation is muddled at the bottom end.	

- (e) In this study, identify:
 - (i) the independent variable;

(1 mark)

(ii) the dependent variable.

(1 mark)

(i) The independent variable is whether the participant is alone or with others. Size of group.

 $\overrightarrow{AO1} = 1 \text{ mark}$

(ii) The dependent variable is the mean noise rating for each condition. Amount of noise being made.

AO1 = 1 mark

(f) Why was it necessary for the participants to wear earplugs?	(1 mark)
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So that they could not hear the noise being made by the others.

AO2: 1 mark

(g) Describe the results of the study.

(2 marks)

In condition A the mean noise rating was 9.0. In condition B the mean noise rating was 3.0. Figures not necessary.

AO1 = 2 marks

To 2 marks as follows:

2 marks	Results from both conditions must be described.
1 mark	Partial description of results.

(h) Use your knowledge of psychology to explain the results shown in **Table 3**. (3 marks)

AO₂

The results of the experiment seem to show that social loafing has occurred. When people are working together in a group, each individual tends to reduce their own effort.

In condition B where there were six participants working together, the mean noise rating was much lower than in condition A.

AO2 = 3 marks

To 3 marks as follows:

3 marks	Full explanation linked to the results of the study reflecting the detail of 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.

SECTION C - DEVELOPMENTAL PSYCHOLOGY

Total for this question: 30 marks

(a) Explain the difference between the terms *privation* and *deprivation*. (3 marks)

AO1

Privation occurs when a child fails to develop an attachment. Deprivation occurs when the child's attachment is damaged or broken.

AO₂

Therefore the difference centres on whether an attachment has been formed or not.

AO1 = 2 marks AO2 = 1 mark

To 3 marks as follows:

3 marks	The difference is clearly explained reflecting the detail of the mark scheme.
2-1 marks	The difference is briefly explained at the top end. At the bottom end, the answer is muddled.

(b) Describe **one** study by Rutter in which separation 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)

AO1

The reason for Rutter's study was to look at the long-term effects of early separation from mothers. His sample comprised of 9-12 year-old boys from the Isle of Wight and from London. He used a correlational method to investigate whether there was a relationship between anti-social behaviours (delinquency) in boys who had suffered maternal deprivation through illness and those who had suffered maternal deprivation due to family or psychiatric problems. He found that anti-social behaviour was much more likely when the separation occurred because of family or psychiatric problems. Rutter concluded that the reason for separation was more important than the actual separation itself.

AO1 = 5 marks

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 or the description is muddled.

(c) (i) According to Piaget, what characteristic of cognitive development is Joshua failing to show?

(1 mark)

Object permanence.

AO1 = 1 mark

(ii) According to Piaget, in what stage of cognitive development is Joshua?

(1 mark)

Sensori-motor stage. Accept first stage.

AO1 = 1 mark

(d) Describe **one** study designed by Piaget to demonstrate the *formal operations* 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)

AO1

The reason for Piaget's study was to see if children in the formal operations stage were capable of logical thought. He set up an experiment known as the 'pendulum task'. Children were given several weights and a length of string suspended from a hook. They had to consider whether the length of string, the heaviness of the weight or the strength of push most affected the speed of swing of the pendulum. He found that formal operational children set up ideas in their heads and then investigated each possibility. He concluded that children in this stage could think systematically about problems whereas younger children in other stages could not.

AO1 = 5 marks

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 reflects the detail of the mark scheme.
3-1 mark	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.

(e) Explain how Piagetian theory has been criticised by other psychologists, such as Hughes or McGarrigle. Use research evidence in your answer. (6 marks)

AO2

Piaget used the 'three mountains task' to demonstrate egocentricity in the pre-operational stage. Some psychologists have suggested that this task was too complex. Swiss mountain scenes are not part of most children's experience. Hughes devised a task that children could relate to much more easily using two intersecting walls, a 'naughty boy' doll and toy policeman. The child was asked to hide the boy from the policeman. To do this the child had to take account of two different points of view. 90% of pre-operational children gave the correct answers. This shows that children have largely lost their egocentric thinking by four years of age because they are able to take the view of another. For a description of Hughes study only, maximum of 4 marks.

AO2 = 6 marks

To 6 marks as follows

6-4 marks	Clear explanation of how the work of other(s) could be used to criticise Piagetian theory reflecting the detail contained in the mark scheme. Links with Piaget are explicit at the top end.
3-1 marks	Answer which is muddled at the bottom end. At the upper end there is an accurate but brief explanation. Maximum of 3 marks if no research.

(f) Distinguish between the *Oedipus complex* and the *Electra complex*. (3 marks)

AO1

Freud proposed that a boy experiences the Oedipus complex because of his desire for his mother and fear that his father will castrate him. A girl experiences the Electra complex because of her unconscious longings for her father but fear of the loss of her mother's love. Reference to acquiring gender identity.

AO2 Relevant difference identified.

AO1 = 2 marks AO2 = 1 mark

To 3 marks as follows

3 marks	The distinction is clearly made reflecting the detail of the mark scheme.
2-1 marks	The complexes are briefly described at the top end. At the lower end the answer is
	muddled. Maximum of 2 marks if terms are missing or the wrong way around.

(g) Outline **one** criticism of the work of Freud.

(2 marks)

AO₂

There are many valid criticisms of the work of Freud. A criticism that is only stated would attract only 1 mark. Equally, two different stated criticisms would receive a maximum of 1 mark (as the question asks for an outline of **one** criticism). For the second mark, elaboration should be present. For example, Freud's sample was not representative of people in general (1 mark) because he relied on case studies of females from similar backgrounds (1 mark).

AO2 = 2 marks

(h) Explain the role of *hormones* in the development of biological differences between males and females.

(4 marks)

A01

Hormones are chemicals (1 mark) that affect the development of the internal (1 mark) reproductive structures and the external (1 mark) reproductive organs – the genitals. **Max: 2 marks.**

AO₂

The most important hormone for this purpose in males is testosterone (1 mark) which controls development of the penis and scrotum (1 mark). In females, oestrogen (1 mark) will lead to the development of the womb and vagina (1 mark). **Max: 2 marks**

AO1 = 2 marks AO2 = 2 marks

To 4 marks as follows

4-3 marks	Clear explanation reflecting the detail of the mark scheme.
2-1 marks	At the top end, a brief explanation. At the bottom end, the explanation is muddled.

Note: If only one sex is explained – max: 2 marks

SECTION D - PRO- AND ANTI-SOCIAL BEHAVIOUR

4 Total for this question: 30 marks

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

AO1

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

AO₂

In the article, the shop owner believes that young children don't act in this way any more.

AO1 = 2 marks AO2 = 1 mark

To 3 marks as follows

3 marks	A clear definition of moral behaviour with reference to the article.
2-1 marks	A clear definition without reference to the article or the definition is muddled.

(b) Discuss Kohlberg's contribution to our understanding of moral development. Refer to psychological research in your answer. (8 marks)

AO1

Kohlberg posed dilemmas to a sample of boys and analysed their answers. He was interested in the reasons they gave for their moral decisions. From this he proposed three levels of moral development. Level 1 (pre-conventional morality) is where authority is outside the individual and reasoning is based on the physical consequences of actions. Level 2 (conventional morality) is where authority is internalised but not questioned and reasoning is based on group norms. Level 3 (post-conventional morality) is where individual judgement is based on self-chosen principles and moral reasoning is based on individual rights and justice. Most adults don't progress beyond the top of Level 2.

AO₂

As the question asks for discussion, evaluative commentary should also be offered. For example, it might have been difficult for participants to put their reasoning into words and some could have been at a higher level but unable to express it. Kohlberg's approach has been criticised as it seems to suggest that moral reasoning in females is inferior to that of men. As Kohlberg's sample was all males, this could have led to biased results.

AO1 = 5 marks AO2 = 3 marks

To 8 marks as follows:

8-6 marks	Kohlberg's contribution is clearly recognisable in a good and balanced answer which includes description of research plus relevant critical commentary reflecting the detail contained in the mark scheme. Answers must contain both description and evaluation to enter this mark band.
5-3 marks	Limited attempt at discussing Kohlberg's contribution. At the top end, there may be a combination of brief description, of research, plus an attempt at critical commentary or an excellent description of research without any evaluation. At the bottom end there will be brief description of research or evaluative commentary.
2-1 marks	A very brief or muddled account of Kohlberg's contribution.

(c) Describe **one** study in which the behaviour of bystanders was investigated. Include in your answer the reason why the study was conduced, the method used, the results obtained and the conclusion drawn.

(5 marks)

A01

There are several studies which could be offered here. The most likely ones will be based on the work of Latane & Darley, for example, the 'smoke-filled room' experiment or the 'epileptic seizure' experiment. Studies by Latane & Rodin and Darley & Batson could also appear.

Note: the story of Kitty Genovese should not receive credit unless it is reported as a retrospective study of the behaviour of the onlookers. **AO1 = 5 marks**

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 or the description is muddled.

(d) (i) Identify **one** ethical issue that should have been considered when the study you described in (c) was designed. (1 mark)

Any ethical issue which is relevant to the study described in (c) should receive credit. The most likely will be deception, distress caused to participants and informed consent.

AO1 = 1 mark

(ii) Outline how the issue you have identified in (d) (i) could have been dealt with. (2 marks)

A statement of how the issue could have been dealt with will attract 1 mark. The second mark will be for an expansion of this point. For example, if the issue identified was deception, this could have been dealt with in the debrief (1 mark) because participants must be told the true purpose of the study in the end (1 mark). If informed consent is offered then this could also have been dealt with in the debrief (1 mark) because in studies such as these it is necessary not to give too much information away at the beginning of the study (1 mark). AO2 = 2 marks

(e) What is a survey? (2 marks)

A survey is a way of gathering information (1 mark) from a large number of people (1 mark) using methods such as questionnaires (1 mark). Max: 2 marks.

AO1 = 2 marks

(f) State **one** advantage and **one** disadvantage of conducting surveys in psychology. (2 marks)

Any relevant advantage (1 mark) e.g. you can obtain a lot of information quickly. Any relevant disadvantage (1 mark) e.g. participants might not be truthful.

(g) Explain what is meant by:
 (i) the authoritarian child-rearing style; (3 marks)
 (ii) the democratic child-rearing style. (3 marks)

(i)

AO1

Authoritarian parents lack warmth. They do not discuss or explain things. They set many rules and expect obedience. They discipline their children often and quite harshly. Strict punishment.

Credit should be given to studies mentioned.

AO1 = 3 marks

To 3 marks as follows:

3 marks	The answer is clearly expressed reflecting the detail of the mark scheme.
2-1 marks	The answer shows some understanding of the authoritarian style although the
	explanation is limited.

(ii)

AO1

Democratic parents show warmth. They explain to their children what is expected of them and why. Rules are clear and consistent. Discipline is restrained and fair. They are flexible and encourage their children in family decision making. Credit should be given to studies mentioned. More relaxed approach.

AO1 = 3 marks

To 3 marks as follows:

3 marks	The answer is clearly expressed reflecting the detail of the mark scheme.			
2-1 marks	The answer shows some understanding of the democratic style although the			
explanation is limited.				

(h) What likely effect would a democratic child-rearing style have on children's aggression compared to an authoritarian child-rearing style? (1 mark)

Children should be less aggressive (1 mark).

AO2 = 1 mark

Assessment Grid - Tier H

Question	AO1	AO2	RM
1	13	17	12
2	22	8	5
3	18	12	0
4	23	7	7
Total	76	44	24