

GCSE 2004

June Series



Mark Scheme

Psychology

(Subject Code 3181F)

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Dr Michael Cresswell Director General

SECTION A – COGNITIVE PSYCHOLOGY

1

Total for this question: 30 marks

- (a) (i) Identify the name of each structure by placing **A** and **B** in the correct boxes below.
(2 marks)

A	Retina	A
B	Lens	B

AO1 = 2 marks

- (ii) Identify the function of each structure by placing A and B in the correct boxes below.
(2 marks)

Focuses light onto the back of the eye	B
Converts light energy into electrical impulses	A

AO1 = 2 marks

- (b) Use the example in **Figure 2** to explain the difference between *sensation* and *perception*.
(3 marks)

AO1

Sensation refers to the physical stimulation of the sensory receptors whereas perception is the process of interpreting and understanding sensory information.

AO2

In the figure, the black shapes are not in the shape of letters. The sensory information itself has no meaning. In order to perceive the word 'shadow', the brain places an interpretation on what could cause this pattern of shapes.

AO1 = 2 marks AO2 = 1 mark

To 3 marks as follows

3 marks	Clear explanation with relevant reference to the figure.
2-1 marks	Clear explanation without relevant reference to the figure or partially correct explanation.

(c) 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) Positive reinforcement involves strengthening a response because it is pleasant. (1 mark)

(ii) Negative reinforcement involves weakening a response because it is unpleasant. (1 mark)

(iii) Punishment involves strengthening a response by removing something that is unpleasant. (1 mark)

(i) True

(ii) False

(iii) False

AO1 = 3 marks

(d) Explain how Murphy's owner might have shaped his cat's behaviour. (4 marks)

AO1

The behaviour would be built up gradually, step by step. The owner would provide reinforcement (a chocolate drop) every time the cat showed behaviour which was close to what he wanted. Reference to operant conditioning.

AO2

In the first instance, it might have been moving towards the stool when he snapped his finger. Then by rewarding successive approximations to the desired behaviour, the cat would eventually display the behaviour described in the article. **AO1** = 2 marks **AO2** = 2 marks

To 4 marks as follows

4-3 marks	Clear explanation of behaviour shaping, reflecting the amount of detail contained in the mark scheme.
2-1 marks	At the bottom end, a recognisable definition of behaviour shaping will be offered. At the top end there will be a limited attempt at an explanation.

Note: If the explanation offered is clearly not related to behaviour shaping (e.g. sticking food to the light switch!), no marks should be awarded.

- (e) Identify and explain **one** ethical implication of attempting to apply conditioning to human behaviour. (3 marks)

AO1

Ethical implications might include informed consent, the right to withdraw and distress.

AO2

Answers should include a clear explanation of the implication. For example, informed consent involves giving the patient detailed information about what the conditioning procedure entails and what might be experienced. They can then agree to the procedure fully knowing what will happen to them. **AO1** = 1 mark **AO2** = 2 marks

To 3 marks as follows

3 marks	One ethical implication has been fully explained to the level of details contained in the mark scheme.
2-1 marks	At the upper end an ethical implication has been partially explained. At the lower end an ethical implication has been identified.

- (f) For the experiment described above, state:

- (i) the independent variable; (1 mark)
- (ii) the dependent variable. (1 mark)

- (i) The independent variable is the type of question asked. (1 mark)
- (ii) The dependent variable is the number of faces recognised. (1 mark) AO1 = 2 marks

- (g) Use your knowledge of the *levels of processing* explanation of memory to explain the results of the experiment described above. (3 marks)

This is based on a study by Bower & Karlin (although candidates are not expected to know this).

AO1

Group 1 was involved in shallow processing of the pictures by simply identifying the sex of each person in the pictures. Group 2 in deciding whether they were honest or not, had to process the pictures in greater depth. Therefore they were more likely to be remembered.

AO2

The results indicated that Group 2 did recognise more faces. This supports the level of processing explanation. **AO1** = 2 marks **AO2** = 1 mark

To 3 marks as follows

3 marks	Clear psychological explanation of the results reflecting the detail of the mark scheme.
2-1 marks	Explanation which is brief but accurate at the top end or muddled at the bottom end with the psychological content discernible.

- | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (h) (i) Identify one factor which might affect the reliability of eyewitness accounts of people or incidents. (1 mark) |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|

The most likely factors candidates will identify include leading questions, emotion, context of questioning or physiological arousal. **AO1** = 1 mark

- | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (ii) Describe one study in which the factor you have identified above was investigated. Include in your answer the method used, the results obtained and the conclusion drawn. (4 marks) |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

The most likely studies are Loftus & Palmer (leading questions) and Baddeley (context) but others are equally acceptable. **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 one criticism of studies of eyewitness testimony. (3 marks) |
|---------------------------------------------------------------------------------------------------------------------|

In the case of the Loftus study for example, one criticism might be that the study lacked ecological validity. Participants knew they were taking part in an experiment and as they were watching a film, it was not really true to life. It could be argued that the emotional effects of being a real life witness could not be replicated in a laboratory setting. **AO2** = 3 marks

To 3 marks as follows

3 marks	The answer demonstrates a clear understanding of one criticism.
2-1 marks	At the top end the answer demonstrates a limited understanding of one criticism. At the lower end one criticism is stated.

SECTION B – SOCIAL PSYCHOLOGY

2

Total for this question: 30 marks

(a) Describe the results of the experiment.	(3 marks)
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A much larger percentage of Group 2 thought Chris was unsociable compared to Group 1. This was the most frequently chosen description for Group 2. Group 1 also thought Chris to be more imaginative and more humorous compared to Group 2. Humorous was the least chosen description for Group 2.

AO1 = 3 marks

To 3 marks as follows

3 marks	Results are clearly described with all three descriptions being mentioned in the answer.
2-1 marks	Results are partially described, e.g. not every description is included in the answer.

(b) (i) Identify the experimental design chosen for this experiment.	(1 mark)
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Independent groups (1 mark)

AO1 = 1 mark

(ii) Explain one advantage of choosing the design you have identified in (i) above.	(2 marks)
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Any valid advantage will gain 1 mark if it is only stated. If an advantage has been explained, both marks can be awarded. For example, it controls for order effect (1), as each group participates in only one condition (1). Also – advantage of matched pairs or repeated measures must gain credit for (ii) even when incorrect for part (i).

AO2 = 2 marks

(c) (i) Explain why the results of this experiment provide evidence which supports the <i>primacy effect</i> in impression formation.	(3 marks)
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AO1

The results support the primacy effect as the participants seemed to be affected more by the first words they saw.

AO2

Group 1 saw the positive descriptions first and a much larger percentage of them chose positive descriptions of Chris. Group 2 saw negative descriptions first and a much lower percentage of them chose positive descriptions of Chris.

AO1 = 1 mark AO2 = 2 marks

To 3 marks as follows

3 marks	Clear explanation which reflects the detail of the mark scheme.
2-1 marks	Brief or muddled explanation

- (c) (ii) You are about to go for a job interview. Use your knowledge of psychology to explain **one** way in which you would try to make the interviewer form a good impression of you. (3 marks)

Any relevant application of impression formation theory, well explained, can earn full marks.

AO1

For example, bearing in mind the primacy effect, the first impression formed will be very important.

AO2

Therefore smart dress would help as the first thing an interviewer will notice is appearance.

AO1 = 1 mark **AO2** = 2 marks

To 3 marks as follows

3 marks	A clear explanation of how to make a good impression based on psychological theory as reflected in the detail of the mark scheme.
2-1 marks	A brief explanation of how to make a good impression at the top end. At the bottom end, a correct statement or muddled explanation.

- (d) What do psychologists mean by the term *prejudice*? (3 marks)

Prejudice can be defined as a rigid set of attitudes or beliefs which can be either positive or negative, towards a particular group of people. Reference to stereotyping. **AO1** = 3 marks

To 3 marks as follows

3 marks	The answer will reflect the detail of the mark scheme and will be clearly expressed.
2-1 marks	A brief or muddled answer.

- (e) Describe **one** study by Sherif in which the role of prejudice in intergroup conflict was investigated. Include in your answer the method used, the results obtained and the conclusion drawn. (4 marks)

Sherif studied American boys attending a summer camp. In the early stages, the boys were divided into two groups. Conflict was introduced through a series of intergroup contests. Sherif found that hostility between the two groups quickly developed. Prejudice and hostility built up in a number of ways, from fighting to name-calling. Sherif concluded that competition between groups could cause prejudice. **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.

(f) Outline **one** criticism of the study you have described in (e) above. (2 marks)

Sherif's study has been criticised on the basis that the groups were artificially created (1 mark) and therefore did not really reflect everyday life (1 mark). Also, the sample used was not representative of a wide population (1 mark), as all the participants were only 12 year-old white boys (1 mark), it could be argued that it would be dangerous to generalise from these findings (1 mark).

Maximum 2 marks

AO2 = 2 marks

(g) Explain what is meant by the term *deindividuation*. Refer to the article in your answer. (3 marks)

AO1

Deindividuation is the loss of self-awareness and sense of personal responsibility which may occur when we are part of a crowd.

AO2

The article refers to people who have been swept along by the mood of the crowd, behaving in ways they probably wouldn't do on their own. **AO1** = 2 **AO2** = 1

To 3 marks as follows

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

(h) (i) What is meant by the term *social loafing*? (2 marks)

Social loafing is putting less effort into a task (1 mark), when people are working together in a group on that task (1 mark). **AO1** = 2 marks

(ii) Outline **one** everyday situation in which social loafing may occur. (2 marks)

There are many everyday situations which could be discussed for maximum marks. For example, in school, students working together on a project could result in social loafing (1 mark) as each individual may put less effort into the task (1 mark). **AO2** = 2 marks

(iii) Explain how social loafing might be avoided in the everyday situation you have outlined in (ii) above. (2 marks)

To avoid social loafing, the teacher should be aware of how much effort each student is making (1 mark) and perhaps set targets for each person to meet (1 mark) or to have each member of the group monitor another member (1 mark). Maximum 2 marks. **AO2** = 2 marks

SECTION C – DEVELOPMENTAL PSYCHOLOGY

3

Total for this question: 30 marks

(a) What is meant by the term <i>maternal deprivation</i> ?	(2 marks)
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Maternal deprivation is a condition of being separated from the mother in the early years of life (1 mark) after an attachment has been formed (1 mark). AO1 = 2 marks

(b) Describe one study conducted by Bowlby in which maternal deprivation 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)
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The most likely study by Bowlby that will be described is his study of 44 juvenile delinquents. The reason for Bowlby's study was to look for a link between maternal deprivation and juvenile delinquency. His method involved interviewing two groups of 44 participants. One group comprised juvenile thieves and the other group were emotionally disturbed but had no known criminal records. His results showed that of the thieves, 17 out of the 44 had experienced maternal deprivation before the age of five. Of the other group, only two of the 44 reported maternal deprivation. This led Bowlby to conclude that there was a link between maternal deprivation and juvenile delinquency.

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) Explain one criticism of the study by Bowlby which you have described in (b) above.	(3 marks)
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One criticism is that the sample was very small (only 44). Also the sample was all boys who all were juvenile thieves. Therefore, it was a biased sample and not representative of a wider population. Consequently, it would be dangerous to generalise from the results of this study. (Any criticism of the study by Bowlby would be acceptable here) AO2 = 3 marks

To 3 marks as follows

3 marks	The answer will reflect the detail of the mark scheme and will be clearly expressed.
2-1 marks	A brief or muddled answer.

(d) Complete the table below by entering the correct characteristic numbers in the three boxes.
(3 marks)

1	2	5
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(1 mark each. Maximum 3 marks) AO1 = 3 marks

(e) (i) According to Piaget, which characteristic of cognitive development is Harry failing to show?
(1 mark)

Conservation

AO1 = 1 mark

(ii) Identify the stage of cognitive development in which Harry should first be able to realise that the taller beaker contains the same amount of liquid as the shorter one.
(1 mark)

Concrete operational

AO1 = 1 mark

(f) 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) According to Piaget, there are four stages of cognitive development.

(ii) The first stage of cognitive development is called the sensori-motor stage.

(iii) Inferential reasoning is a characteristic of the concrete operational stage.

(iv) Egocentrism is a characteristic of the pre-operational stage. (4 marks)

(i) True

(ii) True

(iii) False

(iv) True

AO1 = 4 marks

(g) Describe **one** study in which the formal operations stage of development was demonstrated. Include in your answer the method used, the results obtained and the conclusion drawn.
(4 marks)

Formal operational thinking has been tested experimentally using the pendulum task. The method involved a length of string and a set of weights. Participants had to consider three factors – the length of the string, the heaviness of the weight and the strength of push. The task was to work out which factor was most important in determining the speed of swing of the pendulum. Results showed that formal operational children approached the task systematically, testing each variable. Piaget concluded that this indicated that these children were thinking logically, in the abstract (unlike younger children).
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.

(h) Using the terms *testosterone*, *oestrogen*, *XY* and *XX*, correctly fill in the boxes below.
(3 marks)

XX
XY
Oestrogen
Testosterone

(1 mark each – maximum 3 marks)

AO1 = 3 marks

(i) Describe Freud's explanation of how gender identity is formed in **either** boys **or** girls.
(4 marks)

Freud proposed that gender identification occurs in the phallic stage for both boys and girls. Credit should be given to reference to either the Oedipus or Electra complex. Sexual desire for the opposite sex parent will feature in good answers as well as anxiety (penis envy in girls), fear of punishment (in the form of castration for boys), and resolution of the conflict by identification with the same sex parent.

AO1 = 4 marks

To 4 marks as follows

4-3 marks	Clear description of Freud's explanation with the majority of features described above for full marks.
2-1 marks	Answer which is muddled or very brief at the bottom end but describes a recognisable but brief explanation at the top end.

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

(a) Using an example, describe how reinforcement might encourage moral behaviour. (3 marks)

AO1

Learning theory says that behaviour that is rewarded (reinforced) is more likely to be repeated. Therefore, if a child behaves in a morally acceptable way and is rewarded, this might encourage moral behaviour.

AO2

For example, if a child shares a toy with another child and receives a smile of approval from an adult, the child is likely to repeat this sharing behaviour. **AO1 = 2 marks AO2 = 1 mark**

To 3 marks as follows

3 marks	The answer will reflect the detail of the mark scheme and will be clearly expressed.
2-1 marks	A very limited or muddled description is given.

(b) Outline **at least one** criticism of the Learning Theory approach to moral development. (3 marks)

There are several criticisms that may be offered and the question allows for more than one to be outlined in less detail than a single criticism. For example, Learning Theory focuses on observable behaviour but fails to explain how moral thinking develops. It could be argued that if reinforcement ceases, then moral behaviour could extinguish over time. According to Learning Theory, moral behaviour will depend on the consequences that follow what children do. Therefore, moral behaviour is determined by those who do the reinforcing. Rewards may not always bring about the desired behaviour – it is necessary for the child to value the reward that is given. **AO2 = 3 marks**

To 3 marks as follows

3 marks	The answer will reflect the detail of the mark scheme and will be clearly expressed. One criticism may be outlined in detail or more than one criticism in less detail.
2-1 marks	A limited outline of one criticism is offered or one or two criticisms merely stated.

(c) (i) What is meant by the term *categories of behaviour*? (1 mark)

Categories of behaviour are where behaviour is broken down into observable components that can be recorded. **AO1 = 1 mark**

(ii) Explain why it is necessary to devise categories of behaviour. (2 marks)

It is necessary to devise categories in order to have operational definitions (1 mark) for objective measurement (1 mark). It allows for ease of recording (1 mark). Maximum 2 marks. **AO1 = 2 marks**

(iii) Suggest **one** category of behaviour that the psychologists might have used in this study. (1 mark)

Any appropriate categories, for example any from:

- Adult males helping drunk man
- Adult females helping drunk man
- Adult males helping blind man
- Adult females helping blind man

(There could also be 4 more categories of ‘not helping)

AO1 = 1 mark

(d) (i) The psychologists decided that it was important for them to establish inter-observer reliability in their investigation. What is meant by the term *inter-observer reliability*? (2 marks)

Inter-observer reliability means that the measurement of behaviour is consistent (1 mark) between observers (1 mark). **AO1** = 2 marks

(ii) Explain how the two psychologists could have established inter-observer reliability in their study. (2 marks)

To establish inter-observer reliability they should observe the same behaviour independently (1 mark) and compare results afterwards (1 mark) **AO1** = 2 marks

(e) (i) Identify **one** ethical issue that the psychologists should have considered before conducting their study. (1 mark)

There are several relevant ethical issues which could be identified. The most likely will be distress caused to onlookers, deception and informed consent. **AO1** = 1 mark

(ii) State how the ethical issue you have identified in (i) could have been dealt with in the study. (1 mark)

A valid means of dealing with the ethical issue stated in answer to (i) should receive credit.

AO2 = 1 mark

(f) (i) Describe **one** study in which bystander intervention 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)

There are several studies which could be described. However, the story of Kitty Genovese should not receive credit unless it is written in the form of a retrospective investigation under the four headings. Studies by Latane & Darley are likely to be offered, for example, the ‘smoke filled room’ experiment or the ‘epileptic seizure’ experiment. **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.

(ii) Outline **at least one** criticism of the study you have described in (i) above. (3 marks)

There are various criticisms that could be offered depending on which study was described. However, rather than finding support for bystander apathy, it could be argued that bystanders’ behaviour could be determined by whether the situation is perceived as an emergency where action is necessary, whether the bystander had knowledge of what to do or whether the bystander might have realised what was really happening. It would also be relevant to raise ethical criticisms. **AO2 = 3 marks**

To 3 marks as follows

3 marks	The answer will reflect the detail of the mark scheme and will be clearly expressed. One criticism may be outlined in detail or more than one criticism in less detail.
2-1 marks	A limited outline of one criticism is offered or one or two criticisms merely stated.

(g) The head teacher in the article said there is a *positive correlation* between the amount of violence watched on television and children’s aggressive behaviour. What does this mean? (1 mark)

X

AO1 = 1 mark

(h) From what the head teacher said, explain why it would be wrong to conclude that watching violence on television **causes** children to behave aggressively. (2 marks)

The research identified shows a correlation between the variables (1 mark). Correlations do not imply cause and effect (1 mark). There could be another variable associated with an increase in both TV viewing and aggression (1 mark). It would require an experiment to identify causes of behaviour (1 mark). Maximum 2 marks. **AO1 = 2 marks**

(i) From the following list of approaches, choose the ones that match each explanation and write them in the boxes next to the explanations.

- *Psychodynamic*
- *Social Learning*
- *Biological*
- *Ethological*

(3 marks)

Psychodynamic
Biological
Social Learning

AO1 = 3 marks

Assessment grid – Tier F

QuestionAO1	AO1	AO2	Research methods	Common marks
1	21	9	5	17
2	17	13	6	15
3	27	3	0	14
4	22	8	13	11
Total	87	33	24	57