



General Certificate of Secondary Education

Psychology 3181

3181/H Higher Tier

Mark Scheme

2007 examination - June series

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The assessment of spelling, punctuation and grammar.

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

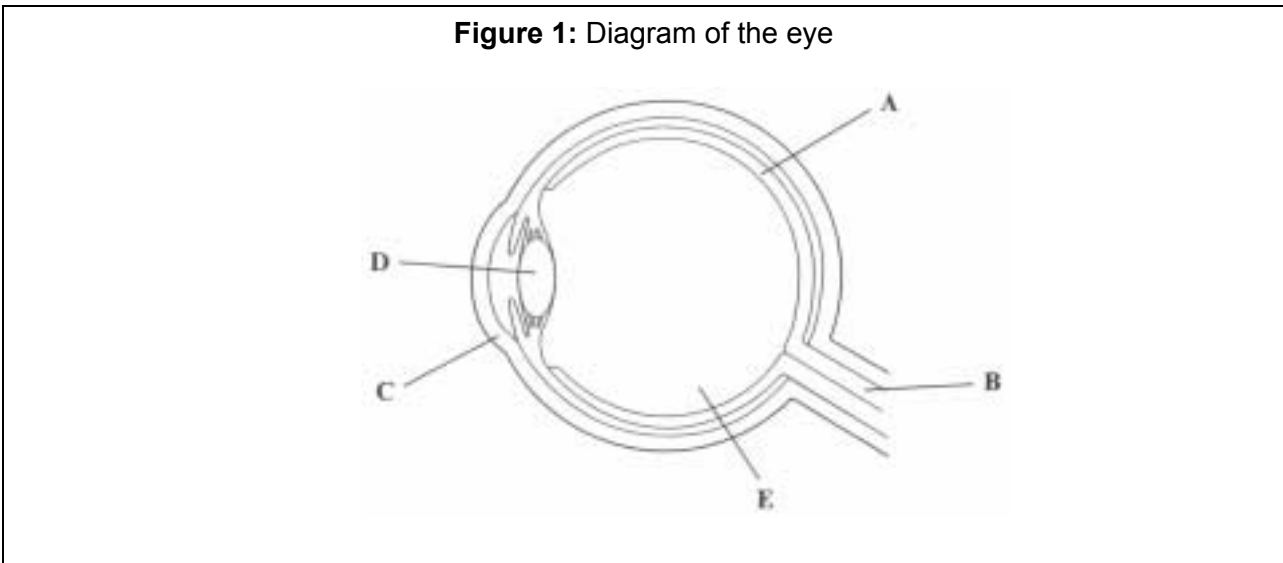
Threshold performance	Candidates spell, punctuate and use the rules of grammar with reasonable accuracy; they use a limited range of specialist terms appropriately.	1 mark
Intermediate performance	Candidates spell, punctuate and use the rules of grammar with considerable accuracy; they use a good range 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

Look at the diagram of the eye in **Figure 1** below and answer the question that follows.



(a) In **Figure 1**, five structures of the eye are labelled with the letters **A, B, C, D** and **E**. Identify the name of each structure by placing the letters in the correct boxes below. One has already been done for you. (3 marks)

AO1

Name of the structure	Letter given in Figure 1
Lens	D
Vitreous humour	E
Retina	(A)
Cornea	C
Optic Nerve	B

AO1 = 3 marks

(b) Identify **two** monocular depth cues in **Figure 2**. Place a tick in each of the **two** correct boxes. (2 marks)

AO1

Retinal disparity	
Height in visual field	✓
Linear perspective	✓
Paradox	

AO1 = 2 marks

-
- | | |
|-----|--|
| (c) | Explain how an everyday example of distortion of perceived size (for example, the moon illusion) could involve size constancy. (3 marks) |
|-----|--|

AO2

Our perception of size is affected by distance cues. The moon appears larger when it is low in the sky. When the moon rises behind buildings and trees, this falsely indicates that the moon is close, so through size constancy scaling, we scale it up and it looks bigger to us. When it is high in the sky, there are no obvious distance cues, so it appears smaller. Reference to: Distance cues, constancy scaling, moon appears larger when low in the sky (1 mark each).

AO2 = 3 marks**To 3 marks as follows**

3 marks	Distortion of perceived size is clearly explained to the level of detail contained in the mark scheme.
2-1 marks	At the upper end, distortion of perceived size has been briefly explained. At the lower end, explanation is unclear or muddled.

A psychologist was interested in factors affecting perception. He conducted an experiment in which two groups of participants were selected at random from a target population of students from the University of Bristol.

Participants in **Group 1** were shown the following list of words, all at the same time, for just one second on a screen. (Note: the fifth word is deliberately spelt incorrectly.)

baggage airport dock ship pasrort

Then the participants were asked to write down all the words they could remember from the list.

Participants in **Group 2** were shown the following list of words, all at the same time, for just one second on a screen. (Note: the fifth word is deliberately spelt incorrectly.)

monkey pigeon duck horse pasrort

Then the participants were asked to write down all the words they could remember from the list.

The psychologist wanted to see what the participants thought the fifth word was in each condition. The results are summarised in **Table 1** below.

Table 1: Percentage of participants who reported the fifth word as either passport or parrot in each condition

	Passport	Parrot
Group 1	90	10
Group 2	20	80

- (d) Use your knowledge of factors affecting perception to explain the results of this experiment.
- (i) Identify the factor that has affected perception in this experiment.

Context	<input type="checkbox"/>
Perceptual defence	<input type="checkbox"/>
Emotion	<input type="checkbox"/>

(tick the correct box)

(1 mark)

AO1

Context	<input checked="" type="checkbox"/>
Perceptual defence	<input type="checkbox"/>
Emotion	<input type="checkbox"/>

AO1 = 1 mark

(ii) Explain how the factor that you have identified in part (d)(i) has affected the results of this experiment. (3 marks)

AO2

Group 1 saw the misspelt word in the context of transport-related words and 90% of the participants thought they saw the word 'passport'. Group 2 saw the word in the context of animals and 80% of them thought they saw the word 'parrot'. Allow explanation of context even if the wrong box has been ticked in part (d) (i). Must be reference to results of both conditions for the 3rd mark.

AO2 = 3 marks

To 3 marks as follows

3 marks	A clear explanation reflecting the detail of the mark scheme. Reference to the results must be clear.
2-1 marks	Explanation is brief but accurate at the top end. Explanation is muddled at the bottom end.

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

Independent groups	<input type="checkbox"/>
Repeated measures	<input type="checkbox"/>
Matched pairs	<input type="checkbox"/>

(tick the correct box)

(1 mark)

AO1

Independent groups	<input checked="" type="checkbox"/>
Repeated measures	<input type="checkbox"/>
Matched pairs	<input type="checkbox"/>

AO1 = 1 mark

(ii) Outline **one** disadvantage of the design you have identified in part (e)(i). (2 marks)

AO1

Disadvantage stated (1 mark), outlined (1 mark), eg participant variables (1 mark), differences in participants' abilities (1 mark), could have an effect on the results in either condition (1 mark). Credit part (e) (ii) if it matches part (e) (i). Max: 2 marks.

AO1 = 2 marks

(f) For the experiment described on the opposite page, state:

(i) the independent variable. (1 mark)

AO1

The IV is whether the first four words are related to travel or animals. Allow the first four words in each condition.

AO1 = 1 mark

(ii) the dependent variable. (1 mark)

AO1

The DV is the percentage of participants who reported the fifth word as either 'passport' or 'parrot' (in each condition), or participants' responses to the fifth word. Allow 'number of participants'.

AO1 = 1 mark

- | |
|---|
| (g) The psychologist selected his participants at random. Explain one advantage of using random sampling. (3 marks) |
|---|

AO1

One advantage of using random sampling is that it produces a representative sample. This is because everyone in the target population has an equal chance of being selected to take part in the study. Allow it reduces experimenter bias and explanation.

AO1 = 3 marks**To 3 marks as follows**

3 marks	Advantage correctly identified with clear explanation.
2-1 marks	Advantage identified and explanation is very brief at the top end (for example, there may be no reference to the target population). Explanation is muddled at the bottom end.

- | |
|---|
| (h) (i) Describe one study in which the levels of processing explanation of memory 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 aim of Craik & Lockhart's study was to see if the level at which words were processed had an effect on how well they were remembered later on. Participants were divided into three groups and asked different kinds of questions about words they were looking at. All the questions required either 'yes' or 'no' answers. One group was asked about the visual appearance of the words. Another group was asked about the sound of the words and the third group was asked about the meanings of the words. The results showed that those in the semantic condition recalled roughly 70% of the words. In the auditory condition 35% were recalled and in the visual condition only 15% were recalled. The conclusion was that the more deeply information is processed, the more likely it is to be remembered. (Allow two conditions described.)

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) Evaluate the study you have described in part (h)(i). (3 marks) |
|---|

AO2

The study has been criticised because it does not explain why deeper processing helps memory. Others have said that deeper processing takes more time and it could be that this helps to improve recall. Also words that require deeper processing require more effort to process and it could be the extra effort that improves recall. The study lacks ecological validity because it does not reflect real life memory tasks. Evaluation must match study described.

AO2 = 3 marks**To 3 marks as follows**

3 marks	Clear evaluation reflecting the detail of the mark scheme.
2-1 marks	Evaluation is very brief at the top end. Evaluation is muddled at the bottom end.

(i) Outline **one** practical application of the levels of processing explanation of memory.

(2 marks)

AO2

Practical application stated (1), outlined (1).

For example, one practical application would be revising for examinations (1). By writing notes in our own words rather than simply copying things, (we are processing semantically) and therefore should remember more (1).

AO2 = 2 marks

SECTION B: SOCIAL PSYCHOLOGY

2

Total for this question: 30 marks

Read the following letter, which appeared in the problem page of a popular teenage magazine, and answer the question that follows.

Green eyes spell trouble!

Dear Helpline,

My best friend is trying to get me to go out with her new neighbour, who has just moved in. I haven't met him but I know exactly what he will be like. She told me he has green eyes. I think that all people with green eyes are jealous and quick-tempered. That spells trouble to me! What do you think?

Yours sincerely,

Karen D.

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

AO1

The theory suggests that we have unconscious ideas about other people that are triggered by receiving a small amount of information about them.

AO2

In the case of this article, the only information that Karen D had was that her friend's new neighbour had green eyes. That triggered ideas about jealousy and quick temper.

AO1 = 2 marks
AO2 = 1 mark

To 3 marks as follows

3 marks	Clear definition with relevant reference to article.
2-1 marks	Brief definition with relevant reference to article or clear definition without reference to article at top end. Brief or muddled definition at bottom end.

(b) Describe **one** study in which primacy effect in impression formation 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

Any relevant study should receive credit. For example, the aim of Luchin’s study was to look at the effect of first impressions on the judgement of personality. Participants were asked to read a short story about an imaginary man called ‘Jim’. In the first condition, they first read a description of him being outgoing but he was then described as being shy. In a second condition, participants first read that he was shy but then became outgoing. The results showed that participants in the first condition rated Jim as sociable and friendly whilst those in the second condition rated him as unfriendly and quiet. The conclusion was that the first information we receive about a person has more impact than later information.

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) Look at the following list of definitions.

An extreme attitude for or against a group. This is based on characteristics assumed to be common to members of that group.	
A belief that all members of a particular group share the same characteristics.	
Treating someone in a favourable or an unfavourable way because of their membership of a particular group.	

From the following list of terms, choose the one that matches **each** definition and write it in the box next to the correct definition.

- Discrimination
- Obedience
- Prejudice
- Stereotype

(3 marks)

AO1

An extreme attitude for or against a group. This is based on characteristics assumed to be common to members of that group.	Prejudice
A belief that all members of a particular group share the same characteristics.	Stereotype
Treating someone in a favourable or an unfavourable way because of their membership of a particular group.	Discrimination

AO1 = 3 marks

- | | |
|--|------------------|
| (d) Discuss Tajfel's explanation of prejudice at an interpersonal level. Refer to psychological research in your answer. | <i>(8 marks)</i> |
|--|------------------|

AO1

Tajfel proposed that, at an interpersonal level, prejudice is seen as arising from within social groups. He said that we divide people into in-groups (groups to which we belong) and out-groups (everyone else). We gain self-esteem from our own groups and we exaggerate how good they are compared to the others. In one study, Tajfel allocated boys to one of two groups on a random basis. They were given a task to do and later they were asked to award points to individual members of each group and to judge how likeable they were. Nearly all participants awarded more points to members of their own group and thought they were more likeable.

AO2

As the question asks for discussion, evaluative commentary should also be offered. There are several criticisms of Tajfel's work. For example, the study could be criticised for its lack of ecological validity. It was not like a real life situation. There is no guarantee that in lab-based experiments, people will act as they do in their natural environment. Also, Tajfel's study involved only 14 and 15-year-old boys, which is not a representative sample of the general population. It has also been suggested that the boys in the study were simply conforming to what they thought Tajfel wanted them to do.

AO1 = 5 marks**AO2 = 3 marks****To 8 marks as follows**

8-6 marks	Tajfel's explanation 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 Tajfel's explanation. 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 Tajfel's explanation.

- | | |
|--|-----------------|
| (e) Read each of the following statements and decide whether each is TRUE or FALSE . Write either TRUE or FALSE on the line below each statement. | |
| (i) Zimbardo conducted studies of deindividuation. | <i>(1 mark)</i> |
| (ii) Anonymity will have no effect on deindividuation. | <i>(1 mark)</i> |
| (iii) Deindividuation increases self-awareness. | <i>(1 mark)</i> |

AO1

- (i) TRUE
(ii) FALSE
(iii) FALSE

AO1 = 3 marks

An experiment was conducted to see what effect an audience would have on football players' success at scoring goals from penalty kicks. This is how the study was carried out.

Two groups of players were selected:

Group 1: experienced players with a lot of penalty shooting practice;

Group 2: less experienced players with no penalty shooting practice.

Each player attempted 10 penalty kicks at goal under two different conditions:

Condition A: without an audience;

Condition B: in front of an audience of 100 people.

The results are shown in **Table 2** below.

Table 2: Mean number of goals scored out of 10 in each condition

	Condition A	Condition B
Group 1	6.1	9.0
Group 2	4.0	1.5

(f) Describe the results of this experiment.

(2 marks)

AO1

For Group 1, there was an increase in the mean number of goals scored when they were in front of the audience. For Group 2, there was a decrease in the mean number of goals scored when they were in front of the audience.

AO1 = 2 marks

(g) Use your knowledge of psychology to explain the results shown in **Table 2** above.

(4 marks)

AO2

This experiment demonstrates 'audience effect'. It shows that an audience improves the performance of experienced players but damages the performance of less experienced players. This is supported by the figures in Table 2, where the performance of the experienced players improved in front of the audience, whilst the less experienced players did worse in front of the audience. Reference to increased arousal (Zajonc) – max 1 mark.

AO2 = 4 marks

To 4 marks as follows

4-3 marks	Full explanation linked to the results of the experiment reflecting the detail of the mark scheme. At the top end, the change in performance of both groups must be made clear.
2-1 marks	Limited explanation of how people tend to behave in such situations. Direct link to the experiment may not be made.

- | |
|--|
| (h) Identify and briefly explain one ethical issue that should have been considered when this study was designed. <i>(2 marks)</i> |
|--|

AO1

Any ethical issue which is relevant to the study should receive credit. The most likely will be informed consent or the right to withdraw.

Correct terminology **must** be used. New BPS guidelines include;

Respect

Competence

Responsibility

Integrity

Also allow;

Consent

Confidentiality

Deception

Right to withdraw

Protection of participants

AO2

For example, with the right to withdraw, participants should be told that if they do not like what is happening, they may leave the experiment at any time.

AO1 = 1 mark

AO2 = 1 mark

SECTION C: DEVELOPMENTAL PSYCHOLOGY**3****Total for this question: 30 marks**

Read the article below and answer the question that follows.

Abandoned baby found in police station doorway!

There was growing concern last night for a nine-month-old baby that was left in the doorway of a local police station. So far, attempts to find the baby's mother have failed. A psychologist working with the police told reporters, "It is urgent that we find the baby's mother as soon as possible. Because of the length of the separation, the baby is showing distress, which we know can be the first sign of maternal deprivation."

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

AO1

Maternal deprivation occurs when the child's attachment bond with its mother is damaged or broken.

AO2

In the article, the psychologist is concerned that the baby is starting to show signs of maternal deprivation.

AO1 = 2 marks
AO2 = 1 mark

To 3 marks as follows

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

(b) Look at the statements in the table below. Each statement can be linked to the work of one of three psychologists, Ainsworth, Bowlby or Rutter. Write Ainsworth **or** Bowlby **or** Rutter in the correct box next to each statement. You may use any name more than once.

Maternal deprivation causes juvenile delinquency	
Attachment can be classed as either secure or insecure	
The reason for separation is more important than the separation itself for the future behaviour of the child	
Studied the behaviour of 9 to 12 year old boys both from London and from the Isle of Wight	

(4 marks)

AO1

Maternal deprivation causes juvenile delinquency	Bowlby
Attachment can be classed as either secure or insecure	Ainsworth
The reason for separation is more important than the separation itself for the future behaviour of the child	Rutter
Studied the behaviour of 9 to 12 year old boys both from London and from the Isle of Wight	Rutter

AO1 = 4 marks

(c) Using an example for each term, outline what is meant by the terms:

(i) *schema*;

(3 marks)

AO1

A schema is a mental framework or cognitive structure. Schemas consist of knowledge about objects, actions and events. Piaget believed that some of these are present at birth. Allow 'based on experience'.

AO2

One example of a schema is grasping. A baby wraps its hand around anything that touches the palm of its hand.

AO1 = 2 marks

AO2 = 1 mark

(ii) *accommodation.**(3 marks)***AO1**

Accommodation happens when a schema is modified to take account of new information. In this way, new schemas are formed or existing ones altered.

AO2

One example of accommodation could be when a baby is given a ball to hold for the first time. A grasping schema using one hand may not work and the baby may have to accommodate by developing a new schema involving grasping with both hands.

AO1 = 2 marks AO2 = 1 mark

The mark scheme for **3 marks** is as follows because **two** explanations are required. Each explanation should be treated separately and the marks then added together.

To 3 marks as follows

3 marks	A clear explanation with relevant example reflecting the detail of the mark scheme.
2-1 marks	A clear explanation without a relevant example or the explanation is muddled.

(d) Describe **one** study designed by Piaget in which egocentrism 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 aim of Piaget's study was to see if children in the pre-operational stage could de-centre. Known as the 'three-mountains task', children were shown a three-dimensional model of a Swiss mountain scene. A doll was placed at different positions around the scene and the children had to select pictures of what could be seen from the different positions. It was found that children below the age of 7 usually pointed to the picture that was their own view of the scene. Piaget concluded that children of this age were egocentric and could not see the world from the point of view of others.

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.

(e) Explain how the study you have described in part (d) has been criticised by psychologists such as Hughes. Use research evidence in your answer. (5 marks)

AO2

Hughes suggested that the three mountains 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. Full credit for criticism of study described in part (d) provided it is Piagetian.

AO2 = 5 marks

To 5 marks as follows

5-4 marks	Clear explanation of how the work of Hughes could be used to criticise Piagetian theory reflecting the detail contained in the mark scheme. Links with Piaget are explicit at the top end. To enter this band of marks, research evidence must be included.
3-1 marks	Answer which is muddled at the bottom end. At the upper end, there is an accurate but brief explanation.

(f) Correctly fill in the boxes below, using **one** of the following terms in each box.

testosterone oestrogen XY XX

Male chromosome	
Female hormone	

(2 marks)

AO1

Male chromosome	XY
Female hormone	oestrogen

AO1 = 2 marks

- (g) How does the social learning approach explain the acquisition of gender identity in boys **and** girls. In your answer, include **one** example about boys' behaviour and **one** example about girls' behaviour. (5 marks)

AO1

This approach argues that children learn to behave as males or females through the processes of observation of models (people who are similar or reinforced for their behaviour), imitation of these models if it is followed by reinforcement. Punishment of behaviour which is not appropriate to the child's sex.

AO2

Two appropriate examples must be offered for AO2 marks – one associated with boys' behaviour and one with that of girls. They could describe rewarded appropriate behaviour or punished inappropriate behaviour.

AO1 = 3 marks AO2 = 2 marks

To 5 marks as follows

5-4 marks	Clear description with appropriate examples reflecting the detail of the mark scheme.
3-1 marks	Less detailed but accurate description at the top end. At the lower end, the answer is muddled.

SECTION D: PRO- AND ANTI-SOCIAL BEHAVIOUR**4****Total for this question: 30 marks**(a) Describe the psychoanalytic approach to moral development. *(5 marks)***AO1**

The psychoanalytic approach emphasises the role of unconscious mental processes in the development of moral behaviour. Freud proposed that the moral part of the personality is the superego (the internalised parent). This develops as a result of the child's identification with the same sex parent. This happens during the phallic stage of psychosexual development. The superego is made up of the ego-ideal which represents the rewarding and approving parent and the conscience which represents the punishing parent. Freud claimed that girls have a weaker moral sense than boys.

AO1 = 5 marks**To 5 marks as follows**

5-4 marks	Accurate description of the psychoanalytic explanation reflecting the detail of the mark scheme at the top end. Clear but slightly less detailed description at the lower end.
3-1 marks	Accurate but brief description at the top end. At the lower end, description is either very limited or muddled.

(b) Discuss **at least one** limitation of the psychoanalytic approach to moral development. *(3 marks)***AO2**

There are several limitations that could be discussed, including Freud's claim that there are gender differences in moral development. For example, research by Hoffman involving children having to resist temptation has shown no gender differences when it comes to breaking instructions. When differences were found, it was usually girls who resisted temptation better. Also, the position of lone parent families could be discussed. There is no evidence to suggest that children in this situation are more amoral than children from two-parent families. Freud suggested that children were not morally mature before the age of seven. Research has proved otherwise. For example, one experiment concluded that television can encourage morally correct behaviour. Moral development can be increased if children observe helping behaviour and are reinforced when they imitate it.

AO2 = 3 marks**To 3 marks as follows**

3 marks	Good discussion of one limitation or brief discussion of two limitations.
2-1 marks	Brief discussion of one limitation or two limitations only stated at the top end. At the bottom end, one limitation only is stated or discussion is muddled.

- (c) Describe **one** study conducted by Latané and Darley to investigate bystander intervention. Include in your answer the reason why the study was conducted, the method used, the results obtained and the conclusion drawn. *(5 marks)*

AO1

There are several studies by Latané & Darley which could be described, including a retrospective study into the behaviour of the witnesses to the Kitty Genovese murder. However, other studies are more likely to be described, including 'the smoke-filled room' and the 'epileptic seizure' experiments.

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) Use your knowledge of psychology to outline **one** practical implication that comes from studies of bystander intervention. *(2 marks)*

AO2

Relevant implication stated (1), knowledge of psychology used (1), for example, one practical implication is that if we see someone in distress, we must not assume that someone else is going to come to the rescue (1). Therefore we must avoid diffusion of responsibility (1). Another implication is that we should not look to others to interpret a situation (1). We should rely on our own understanding, thus avoiding pluralistic ignorance (1).

AO2 = 2 marks

A psychologist was interested in the behaviour of football players during matches. She wanted to see whether there was a correlation between the amount of violence the players watched on television and the number of aggressive acts the players committed during a football game (for example, swearing at the referee). She conducted the study in the following way.

- 10 football players from a local team volunteered to take part in the study.
- The players each made a list of all the programmes they watched on television during the three days immediately before the football match.
- From these lists, the psychologist calculated the number of hours of violence that each player had seen on television.
- During the next football match, she counted the number of aggressive acts that each player committed.

The results of the study are presented in **Table 3** below.

Table 3: Number of hours of violence seen on television and number of aggressive acts committed by each player during the game

Player	Hours of violence seen on television	Number of aggressive acts
1	6	7
2	9	8
3	7	6
4	1	2
5	5	6
6	2	2
7	8	9
8	3	4
9	10	10
10	4	4

- (e) Use the graph paper below to draw a scattergraph displaying the results shown in **Table 3** on the opposite page. Provide a suitable title for this graph and fully label your scattergraph. (5 marks)

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

AO2

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

AO2 = 5 marks

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.

(f) Name and explain the type of relationship shown in the graph you have drawn above. (3 marks)

AO1

The graph shows a positive correlation. As the number of hours of violence seen on TV increases, so do the number of aggressive acts committed during the football game.

AO1 = 3 marks

To 3 marks as follows

3 marks	Clear answer reflecting the detail of the mark scheme.
2-1 marks	Type of relationship named and partial explanation or clear explanation without naming relationship at top end. Relationship named and/or muddled explanation at bottom end.

(g) Write a suitable hypothesis for this study. (2 marks)

AO1

The hypothesis must be a testable statement, eg 'There will be a (positive) correlation (relationship) between the amount of violence seen on television and the number of aggressive acts committed during a football game.' The sense of the two variables should be present. Statement **1 mark**, variables **1 mark**.

AO1 = 2 marks

(h) Outline **one** limitation of using correlations to explain behaviour. (2 marks)

AO2

Correlations do not determine 'cause and effect' (1), they only show the strength of relationship (1): there could be a third factor causing both variables to increase (1). Max: 2 marks.

AO2 = 2 marks

(i) There are many approaches that have attempted to explain aggression. Outline **one** difference between the biological explanation and the social learning explanation of aggression. (3 marks)

AO1

The biological explanation emphasises the role of hormones and chemicals in the brain as causes of aggression. Higher levels of the hormone testosterone have been associated with higher levels of aggression in males. The social learning approach, on the other hand, emphasises the role of observation, imitation and reinforcement as causes of aggression. Allow link to amygdale. Allow reference to 'nature/nurture' if it is appropriately supported.

AO1 = 2 marks

AO2 = 1 mark

To 3 marks as follows

3 marks	Clear answer reflecting the detail of the mark scheme.
2-1 marks	Brief explanation of difference at the top end. At the bottom end, either a difference is stated or the explanation is muddled.