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**GCSE  
PSYCHOLOGY  
8182/2**

**PAPER 2 SOCIAL CONTEXT AND BEHAVIOUR**

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**Mark scheme**

**SAMs**

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V1.0

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

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

Further copies of this mark scheme are available from [aqa.org.uk](http://aqa.org.uk)

## Level of response marking instructions

Level of response mark schemes are broken down into levels, each of which has a descriptor. The descriptor for the level shows the average performance for the level. There are marks in each level.

Before you apply the mark scheme to a student's answer read through the answer and annotate it (as instructed) to show the qualities that are being looked for. You can then apply the mark scheme.

### Step 1 Determine a level

Start at the lowest level of the mark scheme and use it as a ladder to see whether the answer meets the descriptor for that level. The descriptor for the level indicates the different qualities that might be seen in the student's answer for that level. If it meets the lowest level then go to the next one and decide if it meets this level, and so on, until you have a match between the level descriptor and the answer. With practice and familiarity you will find that for better answers you will be able to quickly skip through the lower levels of the mark scheme.

When assigning a level you should look at the overall quality of the answer and not look to pick holes in small and specific parts of the answer where the student has not performed quite as well as the rest. If the answer covers different aspects of different levels of the mark scheme you should use a best fit approach for defining the level and then use the variability of the response to help decide the mark within the level, ie if the response is predominantly level 3 with a small amount of level 4 material it would be placed in level 3 but be awarded a mark near the top of the level because of the level 4 content.

### Step 2 Determine a mark

Once you have assigned a level you need to decide on the mark. The descriptors on how to allocate marks can help with this. The exemplar materials used during standardisation will help. There will be an answer in the standardising materials which will correspond with each level of the mark scheme. This answer will have been awarded a mark by the Lead Examiner. You can compare the student's answer with the example to determine if it is the same standard, better or worse than the example. You can then use this to allocate a mark for the answer based on the Lead Examiner's mark on the example.

You may well need to read back through the answer as you apply the mark scheme to clarify points and assure yourself that the level and the mark are appropriate.

Indicative content in the mark scheme is provided as a guide for examiners. It is not intended to be exhaustive and you must credit other valid points. Students do not have to cover all of the points mentioned in the Indicative content to reach the highest level of the mark scheme.

An answer which contains nothing of relevance to the question must be awarded no marks.

Examiners are required to assign each of the students' responses to the most appropriate level according to its overall quality, then allocate a single mark within the level. When deciding upon a mark in a level examiners should bear in mind the relative weightings of the assessment objectives (see page 27) and be careful not to over/under credit a particular skill. For example, in question 5 more weight should be given to AO3 than to AO2. This will be exemplified and reinforced as part of examiner training.

**Section A**

**Social influence**

**01** Dana is shopping with two of her friends. Her friends both choose sandwiches for lunch. After seeing this, Dana decides to choose a sandwich too.

Which **one** of the following best describes Dana’s behaviour?

- A** Bystander intervention
- B** Conformity
- C** Deindividuation
- D** Obedience

**[1 mark]**

**Marks for this question: AO2 = 1**

B

**02** Outline what is meant by the term bystander behaviour. Referring to the conversation above, identify **one** factor that can influence bystander behaviour **and** suggest how it would have influenced bystander behaviour in this situation.

**[4 marks]**

**Marks for this question: AO1 = 2 and AO2 = 2**

Level	Marks	Description
<b>2</b> <b>Clear</b>	<b>3 – 4</b>	AO1: Description of bystander behaviour is accurate with detail.  AO2: There is effective application of one relevant factor that would affect bystander behaviour in context.  Relevant terminology is used consistently throughout. The answer demonstrates a high level of substantiated reasoning, is clear, coherent and focused.
<b>1</b> <b>Basic</b>	<b>1 – 2</b>	AO1: There is a limited description of bystander behaviour.  AO2: There is a limited attempt to apply one relevant factor that would affect bystander behaviour.  Relevant terminology is occasionally used. The answer occasionally demonstrates substantiated reasoning, but may lack clarity, coherence, focus and logical structure.
	<b>0</b>	No relevant content.

Examiners are reminded that AO1 and AO2 are regarded as interdependent. When deciding on a mark in instances where there is an attempt at more than one assessment objective all attempts should be considered together using the best fit approach. In doing so, examiners should bear in mind the relative weightings of the assessment objectives.

When an answer only contains content related to one of the skills (AO1/AO2), then the levels descriptors for the award of marks for the skill attempted should be applied to the answer, up to the maximum mark available.

**Indicative content:**

**AO1**

- Bystander behaviour refers to the actions a person may or may not take when they are a witness in an emergency situation.
- The choice of action may depend on a number of factors which can increase or decrease the likelihood of the witness getting involved.

**AO2**

- Factors that would have increased bystander intervention to help the lady who collapsed include: similarity to the lady, very few or no other people present when she fell, low cost of helping.
- Factors that would have either decreased bystander intervention or increased bystander apathy should also receive credit. These include; large numbers of others present, personal expertise.

Students do not need to refer to both bystander intervention and bystander apathy to receive full credit.

Accept other relevant factors that affect bystander behaviour.

**03** Imagine that you have been asked to conduct a study to investigate social loafing. Use your knowledge of psychology to describe how you would do this.

In your answer explain:

- how you would select participants to take part in your study
- one feature of the task that participants would be required to do.

**[3 marks]**

**Marks for this question: AO2 = 3**

Up to **2 marks** for a description of how to select participants.

**Plus**

**1 mark** for a feature of the task.

A description of how participants would be selected including reference to an appropriate named sampling method (2 marks).

1 mark **only** for naming an appropriate sampling method.

**Plus**

One feature of the task, eg ask people to clap alone/in a group (1 mark).

**04.1** In **Condition B**, 20% of people picked up litter. Calculate the percentage of people who picked up litter in **Condition A**. Show your workings.

**[2 marks]**

**Marks for this question: AO2 = 2**

55% (2 marks).

$22/40 \times 100$  (1 mark)

**04.2** Use your knowledge of psychology to explain why the level of obedience was different in Condition A and Condition B.

**[2 marks]**

**Marks for this question: AO2 = 2**

1 mark for reference to uniform.

1 mark for explanation of legitimacy/authority.

Indicative content:

- In Condition A the level of obedience was high because the actor wore a uniform (1 mark) – wearing a uniform suggests person giving instruction was legitimate/ an authority figure (1 mark).

Accept this answer expressed in reverse related to Condition B.

**04.3** Explain **two** ways in which the obedience study described in **question 04.1** can be evaluated. **[4 marks]**

**Marks for this question: AO3 = 4**

Level	Marks	Description
<b>2</b>  <b>Clear</b>	<b>3 – 4</b>	Two ways of evaluating the study effectively are explained accurately with detail.  Relevant terminology is used consistently throughout. The answer demonstrates a high level of substantiated reasoning, is clear, coherent and focused.
<b>1</b>  <b>Basic</b>	<b>1 – 2</b>	Two ways of evaluating the study are briefly explained.  <b>OR</b>  One way of evaluating the study effectively is explained accurately with detail.  Relevant terminology is occasionally used. The answer occasionally demonstrates substantiated reasoning, but may lack clarity, coherence, focus and logical structure.
	<b>0</b>	No relevant content

**Indicative content:**

The study can be evaluated with reference to ethical issues and methodological issues. Any combination of these is acceptable.

- The study was unethical because the use of an actor involved deception. Participants did not know that the person giving the instruction was a confederate of the researcher.
- The study was unethical because participants did not know they were taking part in a study, so could not give their (informed) consent to participate.
- The study was conducted in a natural setting/in a park, so it has high ecological validity.

Accept other relevant evaluations.

**05** Describe and evaluate **one** way in which conformity was investigated.

In your description include the method used, the results obtained and the conclusion drawn.

**[9 marks]**

**Marks for this question: AO1 = 4 and AO3 = 5**

Level	Marks	Description
<b>3</b> <b>Detailed</b>	<b>7 – 9</b>	AO1: Relevant knowledge and understanding of a way of studying conformity is accurate with detail (the method used, the results obtained and the conclusion drawn).  AO3: Analysis and evaluation of a way of studying conformity is effective.  Relevant terminology is used consistently throughout. The answer demonstrates a high level of substantiated reasoning, is clear, coherent and focused.
<b>2</b> <b>Clear</b>	<b>4 – 6</b>	AO1: Relevant knowledge and understanding of a way of studying conformity is present.  Award up to a maximum of 4 marks if answer only describes a relevant study at AO1 Level 3.  AO3: There may be some effective analysis and evaluation of a study of conformity.  Relevant terminology is usually used. The answer frequently demonstrates substantiated reasoning, and is clear, generally coherent and focused although structure may lack some logic.
<b>1</b> <b>Basic</b>	<b>1 – 3</b>	AO1: Knowledge and understanding of a study of conformity is present but limited.  Award up to a maximum of 3 marks if answer only describes a relevant study which lacks the accuracy and detail of AO1 Level 3.  AO3: Any analysis and evaluation of a study of a way of studying conformity is of limited effectiveness or may be absent.  Relevant terminology is occasionally used. The answer occasionally demonstrates substantiated reasoning, but may lack clarity, coherence, focus and logical structure.
	<b>0</b>	No relevant content.

Examiners are reminded that AO1 and AO3 are regarded as interdependent. When deciding on a mark in instances where there is an attempt at more than one assessment objective all attempts should be considered together using the best fit approach. In doing so, examiners should bear in mind the relative weightings of the assessment objectives. More weight should therefore be given to AO3 than AO1.

When an answer only contains content related to one of the skills (AO1/AO3), then the levels descriptors for the award of marks for the skill attempted should be applied to the answer, up to the maximum mark available.



**Indicative content:**

**AO1**

Ways of investigating conformity can be seen in the Asch study and any of the variations of this including group, size, task difficulty, anonymity, expertise and so on:

- Method detail such as task description, conditions, factor under investigation, type of methodology/technique used, such as experiments in laboratory conditions or observation of behaviour.
- Results detail: level of conformity seen in each condition.
- Conclusion: explanation for results.

Accept other relevant studies of conformity.

**AO3**

- Relevant methodological issues such as sample (issues such as size, gender, age) location (artificiality of setting), validity (issues associated with laboratory experiments and observation techniques).
- Ethical issues such as consent, deception.
- Time or era dependence.
- Evaluation can involve critical appraisals that are positive and/or negative.

Accept other relevant evaluation points.

**Section B****Language, thought and communication**

**06** From the passage above, identify **two** examples of verbal behaviour and **two** examples of non-verbal behaviour.

**[4 marks]**

**Marks for this question: AO2 = 4**

**1 mark** for each correct response for verbal, up to 2 marks

**1 mark** for each correct response for non-verbal, up to 2 marks.

<b>Verbal</b>	<b>Non-verbal</b>
Tracey passing a note	Tracey smiling
Mary laughing out loud	Mary waving
Teacher telling off	Mary frowning

**07** Outline **one** difference in animal and human communication. Use an example to explain your answer.

**[3 marks]**

**Marks for this question: AO1 = 1 and AO2 = 2**

**Indicative content:**

**AO1**

**1 mark** for outlining a difference.

- Animal communication has more limited functions.

OR

- Greater variety of function for human communication.

**AO2**

**2 marks** for an appropriate example.

- Animals only communicate to pass messages about survival/reproduction/territory/obtaining food such as a rabbit thumping to warn of predators for survival or a bee waggle dance to tell other bees where food is.
- Humans communicate information about things that have not yet happened, they can imagine possible events and talk about these.

**08.0** Briefly evaluate Piaget's theory that language depends on thought.

**[3 marks]**

**Marks for this question: AO3 = 3**

Up to 3 marks for a brief evaluation of Piaget's theory.

**3 marks:** evaluation is clear and accurate.

**2 marks:** a clear evaluation, minor inaccuracy may be present.

**1 mark:** a muddled attempt at an evaluation.

**Indicative content:**

- Very little evidence to support Piaget's theory.
- Very limited research currently taking place into his approach.
- Piaget may have misjudged the degree to which children use language to ask questions and learn about the world.
- Piaget neglected the social function of language.
- There is more research supporting the Sapir-Whorf hypothesis.

Accept other relevant evaluation points.

09 Describe and evaluate Yuki's study of emoticons.

**[6 marks]****Marks for this question: AO1 = 3 and AO3 = 3**

Level	Marks	Description
<b>3</b> <b>Detailed</b>	<b>5 – 6</b>	AO1: Relevant knowledge and understanding of the study is accurate with detail. AO3: Clear and detailed evaluation of the relevant study. Relevant terminology is used consistently throughout. The answer demonstrates a high level of substantiated reasoning, is clear, coherent and focused.
<b>2</b> <b>Clear</b>	<b>3 – 4</b>	AO1: There is a clear description of the relevant study with less detail <b>OR</b> there is a clear and detailed description but basic evaluation. AO3: There is a clear evaluation of the relevant study with less detail <b>OR</b> there is a clear and detailed evaluation but basic description. There may only be description of the study at AO1 Level 3 for 3 marks max. Relevant terminology is occasionally used. The answer occasionally demonstrates substantiated reasoning, but may lack clarity, coherence, focus and logical structure.
<b>1</b> <b>Basic</b>	<b>1 – 2</b>	AO1: There is a basic or muddled description of the relevant study <b>AND/OR</b> AO3: There is a basic or muddled evaluation of the relevant study. Relevant terminology may not be used at all or may be muddled.
	<b>0</b>	No relevant content.

Examiners are reminded that AO1 and AO3 are regarded as interdependent. When deciding on a mark in instances where there is an attempt at more than one assessment objective all attempts should be considered together using the best fit approach. In doing so, examiners should bear in mind the relative weightings of the assessment objectives.

When an answer only contains content related to one of the skills (AO1/AO3), then the levels descriptors for the award of marks for the skill attempted should be applied to the answer, up to the maximum mark available.

**Indicative content:****AO1**

- Yuki showed American and Japanese students emoticons with six different combinations of happy/neutral/sad eyes and mouths. Participants were asked to give a rating between 1 and 9 for how happy they thought each face was.
- The Japanese students gave the highest ratings to the faces with happy eyes and the American students gave the highest ratings to the faces with the happy mouths. Japanese students gave the lowest ratings to the faces with sad eyes and the American students gave the lowest ratings to the faces with sad mouths.

- The results show that Japanese and American people understand facial expressions differently and give more weight to different parts of the face when interpreting another person's emotions. The Japanese focus more on the eyes while Americans focus more on the mouth.
- Yuki concluded that this is because of differences in socialisation in the two cultures.

**AO3**

- Lack of ecological validity, eg Yuki et al used computer generated faces to test participants not real faces.
- Demand characteristics, eg participants were aware they were taking part in a piece of research so may have not given true responses.
- Not representative, eg the samples in both conditions were students – no younger or older people.
- Findings cannot be generalised, eg the study only looked at one element of emotion (happy/sad) and not at any other emotions.

Accept other relevant information.

**10.1** Outline what is meant by the term 'innate'.

**[2 marks]**

**Marks for this question: AO1 = 2**

When a trait or characteristic/behaviour (accept an appropriate example) is due to heredity/inherited/inborn/from genetics (1 mark) rather than being learned through experience (1 mark).

**10.2** With reference to the data in **Table 2**, discuss whether or not smiling might be an innate non-verbal behaviour.

**[6 marks]**

**Marks for this question: AO2 = 3 and AO3 = 3**

Level	Marks	Description
<b>2</b> <b>Clear</b>	<b>4 – 6</b>	AO2: Clear application of knowledge and understanding of the concepts of non-verbal behaviour and innateness.  AO3: Analysis and discussion of the results and their ability to support the concept of innateness is effective. Conclusions drawn are sound and fully expressed.  Relevant terminology is used consistently throughout. The answer demonstrates a high level of substantiated reasoning, is clear, coherent and focused.
<b>1</b> <b>Basic</b>	<b>1 – 3</b>	AO2: Application of knowledge and understanding of the concepts of non-verbal behaviour and innateness may be attempted.  AO3: Analysis and discussion of the results and their ability to support the concept of innateness are of limited effectiveness. There may be an attempt to draw conclusions.  Relevant terminology is occasionally used. The answer occasionally demonstrates substantiated reasoning, but may lack clarity, coherence, focus and logical structure.
	<b>0</b>	No relevant content.

Examiners are reminded that AO2 and AO3 are regarded as interdependent. When deciding on a mark in instances where there is an attempt at more than one assessment objective all attempts should be considered together using the best fit approach. In doing so, examiners should bear in mind the relative weightings of the assessment objectives.

When an answer only contains content related to one of the skills (AO2/AO3), then the levels descriptors for the award of marks for the skill attempted should be applied to the answer, up to the maximum mark available.

#### **Indicative content:**

##### **AO2**

- The non-verbal behaviour in the study is the smiling of the babies which was counted as number of smiles.
- The results for both conditions can be described as similar because 33 and 40 are close numbers, only 7 different.
- The results for both conditions can be described as different because 40 is higher than 33 by 7 smiles.

##### **AO3**

- Drawing the conclusion that the results were very similar suggests that babies do not have to be able see in order to learn to smile, smiling is innate.
- Drawing the conclusion that the results were different suggests that babies have to learn to smile, it is not innate.
- Another conclusion could be that we do not have enough information from the study (about what they were smiling at) to relate the results to innate behaviour.

- The classification of mouth movements as a smile could have been inaccurate which means the data collected could be invalid.

Accept other relevant points which could affect the conclusions drawn, eg familiarity of adults.

**10.3** Which of the following statements most accurately describes the target population for this study?

- A** Babies
- B** Babies who were 3 months old
- C** Blind babies
- D** Smiling babies

**[1 mark]**

**Marks for this question: AO2 = 1**

**B**

**Section C**

**Brain and neuropsychology**

**11** Which **one** of the following statements about the human nervous system is correct? Shade **one** box only.

- A** The autonomic nervous system is responsible for thinking
- B** The central nervous system is part of the peripheral nervous system
- C** The peripheral nervous system consists only of relay neurons
- D** The somatic nervous system consists of sensory and motor neurons

**[1 mark]**

**Marks for this question: AO1 = 1**

D

**12** Which **one** of the following statements about neurons is correct? Shade **one** box only.

- A** Motor neurons carry information to the spinal cord
- B** Relay neurons carry information from motor neurons
- C** Sensory neurons always have longer axons than motor neurons
- D** Sensory neurons carry information to the brain

**[1 mark]**

**Marks for this question: AO1 = 1**

D

**13.1** Below is a diagram of a motor neuron. Identify the parts labelled i) and ii) and write your answers in the spaces provided.

**[2 marks]**

**Marks for this question: AO1 = 2**

- i) Dendrites
- ii) Motor end plates



**13.2** Briefly explain the function of a motor neuron.

**[2 marks]**

**Marks for this question: AO1 = 2**

**2 marks** for an explanation of the function of a motor neuron.

**1 mark** for a muddled/limited explanation of the function of a motor neuron.

**Content:**

The motor neuron carries an electrical signal to a muscle (1 mark) which will cause that muscle to either contract or relax (produce movement) (1 mark).

**14.1** Use your knowledge of the actions of **both** the central nervous system and the autonomic nervous system to explain Sam's experience.

**[6 marks]**

**Marks for this question: AO1 = 2 and AO2 = 4**

**Indicative content:**

**AO1 award one mark for each bullet point to a maximum of 2**

- The CNS is the part of the nervous system that (consciously) recognises the possibility of a threat.
- The ANS responds to this awareness by automatically switching from parasympathetic control to sympathetic control – fight/flight mode.

**AO2 award one mark for each bullet point to a maximum of 4**

- The CNS is in control when Sam is aware of the sound behind him and he decides to run.
- The CNS later recognises his friend's voice and that there is no real danger.
- The ANS can be seen in the increased heart rate and ability to run.
- When the threat recedes, the ANS switches back to parasympathetic action – breathing rate slows.

**14.2** In the space below draw a diagram of a synapse. On your diagram label the following: vesicle, neurotransmitter, synaptic gap (synaptic cleft), receptor, direction of impulse.

**[3 marks]**

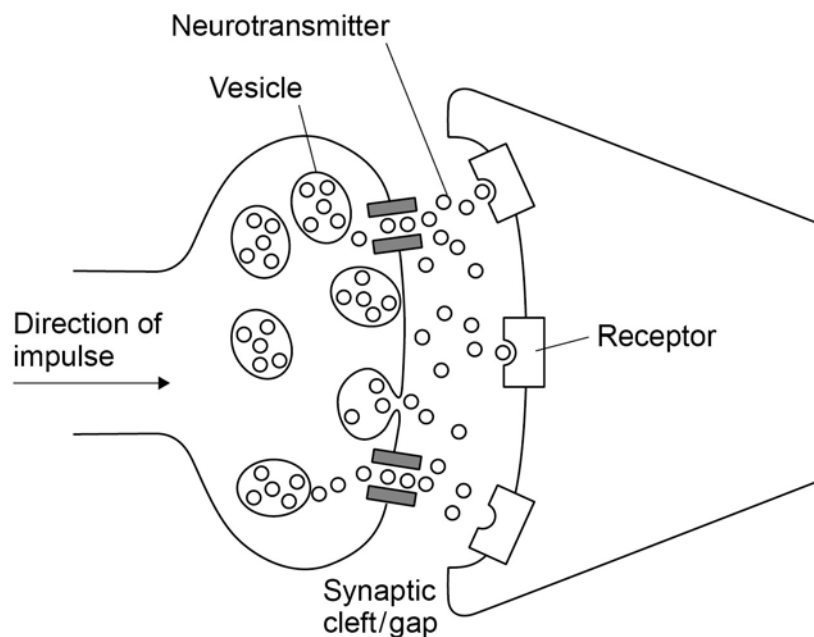
**Marks for this question: AO1 = 3**

**3 marks:** For a diagram with clear and accurate labelling of the five named components.

**2 marks:** A clear diagram with **at least one** required label missing or inaccurately placed.

**1 mark:** a muddled attempt or a diagram with no labels.

**0 marks:** no relevant content.



**15** For each of the definitions below, tick **one** box to identify the correct area of the brain that matches each definition.

**[2 marks]**

**Marks for this question: AO1 = 2**

**1 mark** for **each** correct tick as below.

Definition	Motor	Somatosensory	Auditory
An area that is concerned with the perception of touch, pressure, pain and temperature		✓	
An area that is concerned with the processing of sound			✓

**16** What percentage of patients were offered eye exercises as a treatment? Show your workings. **[2 marks]**

**Marks for this question: AO2 = 2**

45% (2 marks)

$9/20 = 0.45 \times 100$  (1 mark)

**17** Explain how modern scanning techniques have improved our understanding of the relationship between brain and behaviour. **[6 marks]**

**Marks for this question: AO1 = 2 and AO3 = 4**

Level	Marks	Description
<b>2 Clear</b>	<b>4 – 6</b>	<p>AO1: Relevant knowledge and understanding of cognitive neuroscience and scanning techniques is accurate with detail.</p> <p>AO3: Analysis and evaluation of the benefits of modern scanning techniques is effective although expansion is sometimes lacking. Conclusions drawn are sound and fully expressed.</p> <p>Award a maximum of four marks if answer <b>only</b> explains the benefits of scanning techniques at Level 2.</p> <p>Relevant terminology is used consistently throughout. The answer demonstrates a high level of substantiated reasoning, is clear, coherent and focused.</p>
<b>1 Basic</b>	<b>1 – 3</b>	<p>AO1: Knowledge and understanding of cognitive neuroscience and scanning techniques is present but may be limited. Focus may be on description or there may be inaccuracies/omissions.</p> <p>Award a maximum of two marks if answer <b>only</b> describes scanning techniques.</p> <p>AO3: Analysis and evaluation of the benefits of modern scanning techniques is of limited effectiveness or may be absent. Any attempts to draw conclusions are not always successful.</p> <p>Award up to a maximum of three marks if answer <b>only</b> explains the benefits of scanning techniques below AO3 Level 2 descriptor.</p> <p>Relevant terminology is occasionally used. The answer occasionally demonstrates substantiated reasoning, but may lack clarity, coherence, focus and logical structure.</p>
	<b>0</b>	No relevant content

Examiners are reminded that AO1 and AO3 are regarded as interdependent. When deciding on a mark in instances where there is an attempt at more than one assessment objective all attempts should be considered together using the best fit approach. In doing so, examiners should bear in mind the relative weightings of the assessment objectives. More weight should therefore be given to AO3 than AO1.

When an answer only contains content related to one of the skills (AO1/AO3), then the levels descriptors for the award of marks for the skill attempted should be applied to the answer, up to the maximum mark available.

**Indicative content:**

**AO1**

- Modern scanning techniques such as fMRI scans rely on matching behavioural actions with physiological activity.
- Because the person being scanned is usually conscious, they can be directed to produce a particular action – such as looking at something while being scanned.

**AO3**

- The blood flow pattern which is highlighted on the scan shows the researcher which areas of the brain are functioning during that activity.
- Normal/baseline scans can be compared with scans of people with damage to look for explanations of that damage.
- Such scans are non-invasive (fMRI) have no radiation, so no side effects making them very useful for looking at brain-behaviour relationships.
- The researcher can make inferences/informed guesses about areas of damage and the impact of these on behaviour.
- These techniques have enhanced our understanding of problem solving and decision making.
- These techniques open up the area of cognitive neuro science.

Credit use of evidence to support techniques: from Brain and Neuropsychology section this could be reference to Tulving's 'gold' memory study.

**Section D**

**Psychological problems**

**18** Suggest **two** changes in behaviour often seen in people who are diagnosed with unipolar depression. **[2 marks]**

**Marks for this question: AO1 = 2**

Any **two** suggestions from the following:

**Indicative content:**

- lowering of mood
- decrease in activity
- change in sleep pattern
- reduced self-esteem or self-confidence
- ideas of guilt or worthlessness
- loss of pleasurable feelings
- agitation/anger
- loss or increase in appetite.

Accept other relevant symptoms.

**19** Read the following statements about mental health. Decide whether each statement is True or False. Tick **one** box for each statement. **[3 marks]**

**Marks for this question: AO2 = 3**

	True	False
An intervention that could be offered to treat Catherine's addiction is aversion therapy	✓	
Catherine may have a genetic vulnerability to addiction.	✓	
One biological explanation for Catherine's addiction is that she is influenced by her peers		✓

**20** Suggest **one** social effect of significant mental health problems in society. **[2 marks]**

**AO1 2 marks**

2 marks for a detailed suggestion of a possible social effect

1 mark for a brief or muddled suggestion of a possible social effect

**Indicative content:**

- as mental health problems become significant there will be increased demand on mental health/NHS services as people have more need for social care

- increased crime rates are likely to occur as people whose mental health deteriorates are likely to drop out of employment/lose social inhibitions and become more involved in anti-social behaviours
- mental health problems tend to be expensive to treat and therefore have implications for the economy.

Accept other valid social effects, eg social isolation of the mentally ill, public fear of mental illness.

**21.1** Calculate the median rating of effectiveness for the group that was treated with both medication and CBT. Show your workings.

**[2 marks]**

**Marks for this question: AO2 = 2**

8 (2 marks)

5, 6, 7, 8, **8, 8**, 9, 9, 10, 10 (1 mark)

**21.2** The median rating of effectiveness for the medication group was 6. Use your answer from **question 21.1** to sketch a suitable diagram of the median ratings for effectiveness of treatment on the graph paper below.

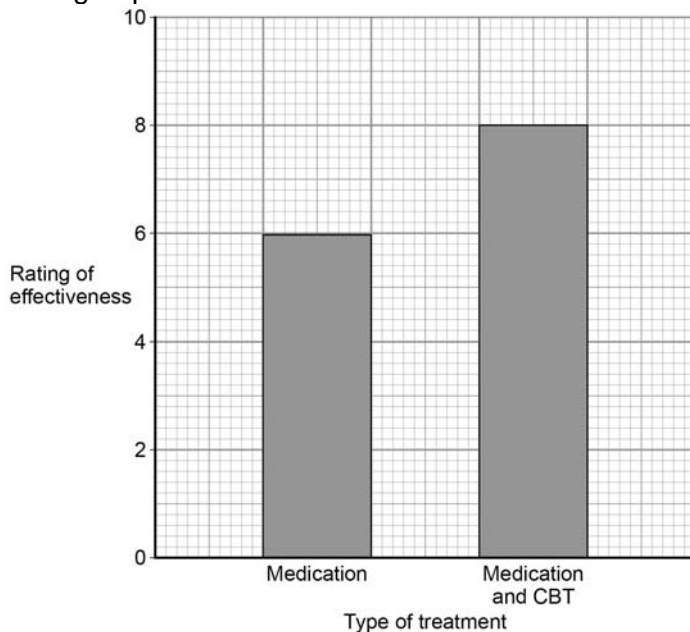
Provide a suitable title and labels for your diagram.

**[4 marks]**

**Marks for this question: AO2 = 4 Award one mark for each bullet point**

- Use of a suitable diagram – ie a bar chart or frequency diagram
- Informative title
- Correct labelling of both axes
- Correct plotting of the results

A bar chart showing the median ratings of effectiveness for a medication group and for a medication and CBT group



**21.3** Give **one** strength of the sampling method used in this study.

**[1 mark]**

**Marks for this question: AO3 = 1**

It is a quick/efficient way of obtaining participants (1 mark).

**21.4** What do the results of this study suggest about the effectiveness of using both CBT and medication to treat unipolar depression? Explain your answer.

**[2 marks]**

**Marks for this question: AO3 = 2**

1 mark for appropriate reference to the results and direction of effectiveness and 1 mark for an appropriate explanation.

**Possible answers:**

The results suggest that using both medication and CBT is a more effective treatment than using medication on its own (1 mark). This is because the people who only received medication as a form of treatment had a lower median rating for effectiveness than those who also had CBT (1 mark).

The people who only received medication as a form of treatment had a median rating of 6 but those who also had CBT had a median rating of 8 (1 mark). This result suggests that medication and CBT together is more effective than just medication and holistic viewpoint (1 mark).

**Note** As the difference in the medians is only two rating points, answers that argue it is not possible to draw a conclusion about effectiveness from these results are acceptable.



<b>22</b>	Describe <b>one</b> study of hereditary factors in addiction and evaluate the research method used in that study.	<b>[9 marks]</b>
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**Marks for this question: AO1 = 4 and AO3 = 5**

Level	Marks	Description
<b>3</b> <b>Detailed</b>	<b>7 – 9</b>	<p>AO1: Relevant knowledge and understanding of a study of hereditary factors in addiction is accurate with detail.</p> <p>AO3: Analysis and evaluation of a study of hereditary factors in addiction is effective. Conclusions drawn are sound and fully expressed.</p> <p>Relevant terminology is used consistently throughout. The answer demonstrates a high level of substantiated reasoning, is clear, coherent and focused.</p>
<b>2</b> <b>Clear</b>	<b>4 – 6</b>	<p>AO1: Relevant knowledge and understanding of a study of hereditary factors in addiction is present.</p> <p>Award up to a maximum of 4 marks if answer <b>only</b> describes a relevant study at AO1 Level 3.</p> <p>AO3: There may be some effective analysis and evaluation/discussion of a study of hereditary factors in addiction. There may be an attempt to draw conclusions.</p> <p>Relevant terminology is usually used. The answer frequently demonstrates substantiated reasoning, and is clear, generally coherent and focused although structure may lack some logic.</p>
<b>1</b> <b>Basic</b>	<b>1 – 3</b>	<p>AO1: Knowledge and understanding of a study of hereditary factors in addiction is present but limited.</p> <p>Award up to a maximum of 3 marks if answer <b>only</b> describes a relevant study which lacks the accuracy and detail of AO1 Level 3.</p> <p>AO3: Analysis and evaluation/discussion of a study of hereditary factors in addiction is of limited effectiveness or may be absent. Any attempts to draw conclusions are not always successful.</p> <p>Relevant terminology is occasionally used. The answer occasionally demonstrates substantiated reasoning, but may lack clarity, coherence, focus and logical structure.</p>
	<b>0</b>	No relevant content.

Examiners are reminded that AO1 and AO3 are regarded as interdependent. When deciding on a mark in instances where there is an attempt at more than one assessment objective all attempts should be considered together using the best fit approach. In doing so, examiners should bear in mind the relative weightings of the assessment objectives. More weight should therefore be given to AO3 than AO1.

When an answer only contains content related to one of the skills (AO1/AO3), then the levels descriptors for the award of marks for the skill attempted should be applied to the answer, up to the maximum mark available.

**Indicative content:**

**AO1**

- Twin study such Kaji (1960) on rates of alcohol abuse in identical and fraternal twins.
- Kaji investigated the concordance rates for alcohol abuse between identical and fraternal twins.
- He found that the concordance rate for identical twins was 54% but that it was only 28% for fraternal twins.
- He concluded that these findings suggest that there are genetic or hereditary factors involved in alcohol addiction.

**AO3**

- Not representative, eg all the participant were twins so cannot generalise to other siblings, or familial relations or general population.
- Findings cannot be generalised to other addictions, eg the study only looked at rates of alcohol abuse and not addiction to other substances.
- Identical twins are often treated the same so it may be environment (nurture) and not genetics (nature) that was the cause of the alcohol abuse.
- 46% of the identical twins were not concordant for alcohol abuse which suggests factors other than genetic ones must also be involved.
- Difficulty of controlling family/social effects.

Accept other relevant studies.

## Assessment Objective Grid

<b>Social influence</b>	<b>AO1</b>	<b>AO2</b>	<b>AO3</b>	<b>Total</b>
01		1		<b>1</b>
02	2	2		<b>4</b>
03		3 (RM)		<b>3</b>
04.1		2 (maths/RM)		<b>2</b>
04.2		2		<b>2</b>
04.3			4 (RM)	<b>4</b>
05	4		5 (3 RM)	<b>9</b>
<b>Total</b>	<b>6</b>	<b>10</b>	<b>9</b>	<b>25</b>

<b>Language, thought and communication</b>				
06		4		<b>4</b>
07	1	2		<b>3</b>
08			3	<b>3</b>
09	3		3 (RM)	<b>6</b>
10.1	2 (recall)			<b>2</b>
10.2		3	3	<b>6</b>
10.3		1 (RM)		<b>1</b>
<b>Total</b>	<b>6</b>	<b>10</b>	<b>9</b>	<b>25</b>

<b>Brain and neuropsychology</b>				
11	1 (recall)			<b>1</b>
12	1 (recall)			<b>1</b>
13.1	2 (recall)			<b>2</b>
13.2	2			<b>2</b>
14.1	2	4		<b>6</b>
14.2	3			<b>3</b>
15	2 (recall)			<b>2</b>
16		2 (maths/RM)		<b>2</b>
17	2		4	<b>6</b>
<b>Total</b>	<b>15</b>	<b>6</b>	<b>4</b>	<b>25</b>

<b>Psychological problems</b>				
18	2			<b>2</b>
19		3		<b>3</b>
20	2			<b>2</b>
21.1		2 (maths/RM)		<b>2</b>
21.2		4 (maths/RM)		<b>4</b>
21.3			1 (RM)	<b>1</b>
21.4			2 (RM)	<b>2</b>
22	4		5 (2 RM)	<b>9</b>
<b>Total</b>	<b>8</b>	<b>9</b>	<b>8</b>	<b>25</b>

<b>Paper Total</b>	<b>35</b>	<b>35</b>	<b>30</b>	<b>100</b>
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