

Exam Questions

Answer Booklet

AQA Psychology





TAKE 5

Topics:

Social Influence

Memory

Attachment

Psychopathology

Approaches

Biopsychology

Research Methods

Paper 1

AQA Psychology



1. **Outline** one ethical issue that has arisen in social influence research. **Refer** to one or more social influence studies in your answer. **[4 marks]**

Mark Scheme

Marks for this question: AO1 = 4

Outline content:

Up to 2 marks for the outline of the ethical issue

Award 1 mark for identification of the ethical issue, and 1 further mark for elaboration

- Deception; protection from harm; the right to withdraw.
- Participants in a study should not be knowingly misled or lied to
- Participants should not be exposed to any more risk than they would encounter in everyday life
- Participants should be able to leave the investigation at any time

If more than one ethical issue is outlined credit the best

Up to 2 marks for reference to one or more social influence studies

2 marks for clear and effective reference to one or more social influence studies

1 mark for limited / muddled reference to one or more social influence studies

- In Milgram's obedience study, participants did not know the shocks were not real; in Asch's conformity study, participants were not aware the other participants were confederates of the experimenter
- In Milgram's study, participants exhibited signs of extreme stress – sweating, shaking, etc.; in Zimbardo's study, prisoners showed signs of disorganised thinking and behaviour
- Milgram's participants were encouraged to continue through the use of verbal prods; Zimbardo's participants were denied requests to leave.

Credit other valid points.

2. **Outline** the Authoritarian Personality as an explanation for obedience. **[4 marks]**

Mark Scheme

Marks for this question: AO1 = 4

Level	Marks	Description
2	3–4	Knowledge of the authoritarian personality explanation of obedience is clear and detailed. There is appropriate use of specialist terminology.
1	1–2	Knowledge of the authoritarian personality explanation of obedience is limited/muddled. Use of specialist terminology is either absent or inappropriate.
	0	No relevant content.

Possible content:

- a dispositional (rather than situational) explanation for obedience
- a collection of traits/personality type developed from strict/rigid parenting
- obedient/servile towards people of perceived higher status (authoritarian submission)
- right wing authoritarianism - expecting obedience from those of lower status (authoritarian aggression)
- examples of other traits – conventional/dogmatic/hostile towards those of perceived lower status (scapegoating)
- a high score on the F-scale would indicate authoritarianism and higher levels of obedience

For full marks the response should make clear and explicit links to obedience.
Credit other relevant material.

3. **Outline** one limitation of the Authoritarian Personality explanation for obedience. **[2 marks]**

Mark Scheme

Marks for this question: AO3 = 2

2 marks for a clear and coherent limitation with some elaboration.

1 mark for a limited/muddled limitation.

Possible limitations:

- dispositional explanations have difficulty accounting for obedience in entire societies
- research findings in obedience studies, eg. Milgram, can be more readily explained by situational factors/alternative explanations
- conservative/right wing bias, ignores obedience/extremism/prejudice on the political left
- not necessarily a causal explanation - could be another factor that explains the link between personality and obedience, for example lack of education.

Credit other relevant limitations.

Do not credit methodological limitations based on the measurement of authoritarianism unless specifically linked to the explanation.

4. A teacher was absent and left work for students to complete during the lesson. Some students in the class did not do the work their teacher had left for them. **Use** one possible explanation of resistance to social influence to **explain why** this happened. **[4 marks]**

Mark Scheme

Marks for this question: AO2 = 4

Level	Marks	Description
2	3–4	Application of knowledge of one explanation of resistance to social influence is effective. There is appropriate use of terminology.
1	1–2	Application of knowledge of one explanation of resistance to social influence is limited. The answer lacks accuracy and detail. Use of terminology is either absent or inappropriate.
	0	No relevant content.

Possible content:

Social support:

- disobedience/resistance/defiance is more likely to occur in the presence of others who are disobeying/disobedient role models
- 'some students' suggests there was more than one who did not complete the work
- this would have given others more confidence to ignore the teacher's instructions
- social support is associated with diffusion of responsibility/the more people who disobey the less severe the consequences are likely to be – the students may have reasoned that the more of them who disobey, the less likely they are to be in trouble
- credit use of evidence to support explanation/application, eg Milgram – two confederates-one naive participant variation.

Locus of control:

- disobedience/resistance/defiance is more likely to occur in those who have an internal locus of control
- the students who disobeyed the instructions may all have had this personality trait in common
- this meant they relied on their own judgement of whether to complete the work, rather than the teacher's
- credit use of evidence to support explanation/application, eg Holland – 37% of internals refused to continue to maximum shock level.

Credit other relevant application e.g. situational factors such as proximity and location; legitimacy of Authority; external locus of control if fully justified as an explanation of resistance to social influence

No credit for simply naming an explanation

If no application, maximum of **one** mark

5. A parent-toddler group meets for a trip to a soft play centre. They choose to go to MiniWorld. Julie, one of the parents, thinks MiniWorld is overpriced and would rather go to Kids' Cave. She doesn't say anything though, as all the other parents seem keen on MiniWorld. Anthony always used to take his twins to Kids' Cave. He has since joined the parent-toddler group. Anthony has heard the other parents talk about the play area at MiniWorld as being better than the one at Kids' Cave. He now takes his twins to MiniWorld on the days the group does not meet.

Discuss two explanations for conformity. **Refer** to Julie and Anthony in your answer. **[16 marks]**

Mark Scheme

Marks for this question: AO1 = 6, AO2 = 4, AO3 = 6

Level	Marks	Description
4	13–16	Knowledge of explanations is accurate and generally well detailed. Application is clear and effective. Discussion is thorough and effective. Minor detail and/or expansion of argument is sometimes lacking. The answer is clear, coherent and focused. Specialist terminology is used effectively.
3	9–12	Knowledge of explanations is evident but there are occasional inaccuracies/omissions. Application/discussion is mostly effective. The answer is mostly clear and organised but occasionally lacks focus. Specialist terminology is used appropriately.
2	5–8	Limited knowledge of explanations is present. Focus is mainly on description. Any discussion/application is of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions. OR one explanation only at Level 3/4.
1	1–4	Knowledge of explanations is very limited. Discussion/application is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology is either absent or inappropriately used. OR one explanation only at Level 1/2.
	0	No relevant content.

Possible content:

Normative social influence

- refers to the social rules that govern behaviour and the need to be seen as a member of the social group
- underpinned by a desire for social approval/acceptance/avoidance of rejection
- suggests that conformity is public agreement with the group and not private agreement (compliance)
- change in attitude/behaviour is temporary
- motivated by emotional reasons – 'the need to be liked'.

Informational social influence

- refers to the idea that the individual believes the group has more knowledge/expertise
- suggests that conformity is agreement with the group due to uncertainty about correct responses or behaviour on the part of the individual
- can result in public and private opinion matching (internalisation)
- change in attitude/behaviour is more likely to be permanent
- motivated by cognitive reasons – 'the need to be right'.

Possible application:

- Julie conforms for normative reasons – she agrees to go to MiniWorld as all the other parents 'seem keen', she does not want to be an outsider by suggesting they go to Kids' Cave
- This leads to Julie's compliance – she thinks MiniWorld is 'overpriced' but 'doesn't say anything'; her public behaviour and private opinion do not match
- Anthony conforms for informational reasons – he is a 'new member of the group' and so looks to the other parents as a source of information/guidance
- he has heard that MiniWorld has better facilities and has adopted that view (internalisation)
- he visits MiniWorld away from the group further suggesting that this is a permanent change in opinion.

Possible discussion points:

- use of evidence to support each explanation, eg. Asch, Sherif, Jenness
- use of Asch variations to support NSI, eg. group size, unanimity, and/or ISI, eg task difficulty
- discussion of dispositional reasons for conformity/resistance, eg external/internal locus of control
- discussion of difficulty of measuring and/or distinguishing between the two explanations.

Only credit evaluation of the methodology used in studies when made relevant to discussion of the explanations.

Credit other relevant material.



Memory Practice Q's & Answers



1. Two types of long-term memory are semantic and episodic. **Outline** two ways in which episodic memories are different from semantic memories. **[4 marks]**

Mark Scheme

Marks for this question: AO1 = 4

For **each** difference award-

2 marks for a clear and coherent difference

1 mark for a limited/muddled difference

Possible differences:

- episodic memories are memories of (autobiographical) events in your life, semantic memories are memories of facts/general knowledge/the rules of language
- episodic memories involve (contextual) knowledge of when ('time-stamped') and where the information was learnt; however, such information is not necessary for recall of semantic memories
- episodic memories are more likely to involve the storage of emotional content in memory, such as how one felt at the time; however, such information is not necessarily encoded as part of semantic memories
- episodic memories are generally based on an individual's subjective experience whereas semantic memories are objective facts about the world.

Credit other relevant differences.

Note: Straightforward descriptions of each type of memory, without explicit/clear difference(s) maximum

1 mark

2. **Briefly describe** retrieval failure as an explanation of forgetting. **Outline** one limitation of this explanation. **[4 marks]**

Mark Scheme

Marks for this question: AO1= 2, AO3 = 2

2 marks for a clear and coherent outline of the explanation.

1 mark for a limited/partial outline.

Possible content:

- forgetting is due to an absence of cues, preventing access to long-term memory
- cues may be context dependent (to do with the place where information was originally stored) or state dependent (the person's emotional/physical state at the time of encoding)
- credit explanation of the encoding specificity principle.

Credit other valid content.

PLUS

2 marks for a clear and coherent limitation.

1 mark for a brief or muddled limitation.

Possible limitations:

- the influence of context cues may be overstated so the explanation has difficulty accounting for successful recall in different contexts
- nature of supporting evidence, eg Godden and Baddeley is based on the recall of trivial material which reduced the validity of the explanation
- contradictory findings – the context effect disappears when participants are tested using recognition rather than free recall tasks
- reasoned comparison with alternative explanation, eg interference.

Credit other valid limitations.

3. A student showed participants a film of a car accident. After watching the film, each participant was asked to write down what they had seen. The student was surprised to see that the descriptions of the accident were quite different. The student's psychology teacher suggested that the participants' recall might be improved by using cognitive interview techniques.

Suggest two cognitive interview techniques that could be used to improve participants' recall of the film. [4 marks]

Mark Scheme

Marks for this question: AO3 = 4

Level	Marks	Description
2	3–4	Suggestion of how two cognitive interview techniques might improve recall is clear, accurate and coherent. There is appropriate use of terminology.
1	1–2	Suggestion of how two cognitive interview techniques might improve recall is limited. The answer lacks accuracy and detail. Use of terminology is either absent or inappropriate. OR one technique at Level 1/2
	0	No relevant content.

Possible content:

- the participants could have been asked to report every detail; elaboration might refer to e.g. the colour of the cars, even if seemingly irrelevant, or how this technique might trigger additional information
- the participants could have been asked to recall the events in a different order; elaboration might refer to starting e.g. from the point of impact to the start of the film, or how this technique might have disrupted the influence of schema/expectations
- the participants could have been asked to recall the event from the perspective of others; elaboration might refer to eg the driver of one of the cars, or how this technique might disrupt the influence of schema/expectations
- the participants could have been encouraged to mentally reinstate the context; elaboration might refer to eg being reminded of the weather and the general environment, or how this technique might trigger recall. Credit reference to the encoding specificity principle.

Credit other relevant suggestions e.g. strategies from the enhanced cognitive interview.

Simply naming two techniques, maximum **one** mark. Naming one technique is not creditworthy.

4. Two police officers are discussing the testimony of an eyewitness. The eyewitness had described a robbery she had seen. 'At first, the witness said she was convinced the suspect was wearing glasses and had a limp,' explained one of the officers, 'but later she said she may have just been repeating what she'd heard from other witnesses.' 'I'm not sure we're going to be able to use her statement,' replied the other officer.

Discuss the effect of post-event discussion on the accuracy of eyewitness testimony. **Refer** to the information above in your answer. [8 marks]

Mark Scheme

Marks for this question: AO1 = 3, AO2 = 2, AO3 = 3

Level	Marks	Description
4	7–8	Knowledge of post-event discussion is accurate with some detail. Application is effective. Discussion is thorough and effective. Minor detail and/or expansion of argument is sometimes lacking. The answer is clear, coherent and focused. Specialist terminology is used effectively.
3	5–6	Knowledge of post-event discussion is evident but there are occasional inaccuracies/omissions. There is some appropriate application/effective discussion. The answer is mostly clear and organised but occasionally lacks focus. Specialist terminology is used appropriately.
2	3–4	Limited knowledge of post-event discussion is present. Focus is mainly on description. Any application/discussion is of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions.
1	1–2	Knowledge of post-event discussion is very limited. Application/discussion is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible content:

- witnesses may discuss what they have seen (with co-witnesses or other people)
- this may lead to contamination of memory/unreliable recall/false memory/confabulation reducing the accuracy of eyewitness testimony
- knowledge of relevant research studies
- conformity effect – witnesses copy others' accounts to win social approval
- source monitoring – distortion of memory occurs when alternative accounts are heard, creating confusion).

Possible application:

- 'I'm not sure we're going to be able to use her statement...', suggests that contamination of memory has occurred/the account is unreliable
- '...may have just been repeating what she heard from other witnesses', suggests post-event discussion has occurred
- the witness is unsure whether her account is genuine – source monitoring/confusion.

Possible discussion:

- use of evidence to support or refute the explanation, eg Gabbert et al (2003) – 71% of participants mistakenly recalled aspects of an event they had picked up in a discussion
- effects of post-event discussion can be reduced if participants are warned of the effects, eg Bodner et al (2009)
- difficulty in distinguishing between explanations
- comparison with alternative factors, eg leading questions, anxiety.

Credit other relevant material.

5. Rory is talking with his grandparent and playing a game on his phone at the same time. The game involves matching blocks of the same colour to complete vertical and horizontal lines. It is only when his grandparent asks him to describe his route to school that Rory puts down his game so he can concentrate fully on his answer.

Discuss the working memory model. **Refer** to Rory's behaviour in your answer. **[16 marks]**

Mark Scheme

Marks for this question: AO1 = 6, AO2 = 4, AO3 = 6

Level	Marks	Description
4	13–16	Knowledge of the working memory model is accurate and generally well detailed. Application is effective. Discussion is thorough and effective. Minor detail and/or expansion of argument is sometimes lacking. The answer is clear, coherent and focused. Specialist terminology is used effectively.
3	9–12	Knowledge of the working memory model is evident but there are occasional inaccuracies/omissions. Application and/or discussion is mostly effective. The answer is mostly clear and organised but occasionally lacks focus. Specialist terminology is used appropriately.
2	5–8	Limited knowledge of the working memory model is present. Focus is mainly on description. Any discussion and/or application is of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions.
1	1–4	Knowledge of the working memory model is very limited. Discussion and/or application is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible content:

- version of STM which sees this store as an active processor
- description of central executive and sub-systems/components – visuo-spatial scratch/sketch pad (visual cache, inner scribe); phonological store/loop; articulatory loop/control process; primary acoustic store; episodic buffer (versions vary – not all sub-systems need to be present for full marks)
- information concerning capacity and coding of each store
- allocation of resources/divided attention/dual-task performance.

Possible application:

- in the early part of the conversation, Rory/the central executive can divide attention between the conversation and the game on his phone
- this is because the two tasks use different sub-systems: phonological store/articulatory loop for the conversation and VSSP for the game
- when he is asked to recount his route to school (a visuo-spatial task), this places too many demands on the VSSP
- this means Rory must abandon his game to free up more attentional resources because of the limited capacity of the stores

Possible discussion:

- use of evidence to support or refute the model/individual sub-systems, eg Hunt – central executive; KF case study – separate visual and verbal stores in STM; Paulescu et al – PET scan; Logie – mental rotation task for VSSP
- explains how cognitive processes interact
- a view of memory that is active rather than passive (in contrast to the multi-store model)
- provides explanation/treatments for processing deficits, eg dyslexia
- explains results of dual task studies, eg Baddeley
- vague, untestable nature of the central executive
- supported by highly controlled lab studies which may undermine the validity of the model.

Credit other relevant material.



Attachment Practice Q's & Answers



1. Nine-year-old Annie asks her mother, "What was I like as a toddler?"
"Oh, you could be a bit difficult," Annie's mother replies. "You used to scream when I left you at nursery. When I returned to pick you up, you would run towards me and then push me away." **Identify** the attachment type that Annie's mother is describing. [1 mark]

Mark Scheme

Marks for this question: AO2 = 1

Insecure-resistant/anxious-resistant/insecure-ambivalent/resistant/ambivalent/Type C.

Do **not** credit 'insecure'.

2. **Distinguish** between two other types of attachment. [4 marks]

Mark Scheme

Marks for this question: AO1 = 4

Level	Marks	Description
2	3–4	Distinction between two types of attachment is mostly clear and accurate, with evidence of either breadth or detail. The answer is mostly coherent with effective use of terminology.
1	1–2	There is limited/partial distinction between two types of attachment. The answer may lack coherence. Use of terminology may be either absent or inappropriate.
	0	No relevant content.

Possible content:

- secure attachment/Type B shows moderate levels of stranger anxiety whereas insecure-avoidant/Type A shows low levels
- Type B shows moderate levels of separation anxiety whereas Type A shows low levels
- Type B shows joy on reunion whereas Type A shows little response
- Type B shows use of attachment figure as a safe base whereas Type A shows high levels of independent behaviour
- credit distinctions based on other types of attachment, eg disorganised; disinhibited.

No marks for simply naming two (other) types of attachment.

3. Different attachment types were first identified in Ainsworth's 'Strange Situation'. **Evaluate** the procedure known as the 'Strange Situation'. [5 marks]

Mark Scheme

Marks for this question: AO3 = 5

Level	Marks	Description
3	4–5	The evaluation of the strange situation procedure is clear and detailed. The answer is generally coherent with effective use of specialist terminology.
2	2–3	The evaluation of the strange situation procedure lacks some detail/accuracy. Specialist terminology is not always used appropriately or is absent.
1	1	The evaluation of the strange situation procedure is very limited/muddled. Specialist terminology is absent.
	0	No relevant content.

Possible evaluation:

- controlled observation lacks ecological validity
- standardised procedure allows for replication
- sole focus on the mother-child relationship
- evidence, eg Bick et al, suggests inter-rater reliability is high
- culture-bound test/imposed etic
- original study used only three attachment types
- procedure may measure something other than attachment type, eg temperament
- discussion of the ethics of the study.

Accept other valid points.

4. **Outline** the learning theory of attachment. [4 marks]

Mark Scheme

Marks for this question: AO1 = 4

Level	Marks	Description
2	3–4	Knowledge of the learning theory of attachment is clear and detailed. The answer is generally coherent with effective use of specialist terminology.
1	1–2	Knowledge of the learning theory of attachment is limited or muddled. There may be limited reference to how it accounts for attachment. Specialist terminology is not always used appropriately or is absent.
	0	No relevant content.

Possible content:

- emphasises the importance of food in attachment – 'cupboard love'
- the role of classical conditioning – the caregiver (eg mother) starts as a neutral stimulus (NS), over time becomes associated with 'food' and produces the conditioned response (CR) of pleasure
- role of operant conditioning – crying leads to a response from the caregiver (eg feeding), the caregiver receives negative reinforcement when the crying stops
- hunger is a primary drive, attachment is a secondary drive – learned by an association between the caregiver and satisfaction
- credit reference to stimulus generalisation (eg. multiple attachments) if used to help explain learning theory of attachment.
- credit reference to other learning theories, eg SLT.

Credit other valid points.

Note

- Response can gain full credit for just outlining classical OR operant theory of attachment.
- Learning theory per se is **not creditworthy**, answers must be shaped towards explaining attachment.

5. **Discuss** research into the influence of early attachment on childhood and/ or adult relationships. [16 marks]

Mark Scheme

Marks for this question: AO1 = 6 and AO3 = 10

Level	Marks	Description
4	13–16	Knowledge of research into the influence of early attachment on childhood and/or adult relationships is accurate and generally well detailed. Discussion is thorough and effective. Minor detail and/or expansion of argument is sometimes lacking. The answer is clear, coherent and focused. Specialist terminology is used effectively.
3	9–12	Knowledge of research into the influence of early attachment on childhood and/or adult relationships is evident but there are occasional inaccuracies/omissions. Discussion is mostly effective. The answer is mostly clear and organised but occasionally lacks focus. Specialist terminology is used appropriately.
2	5–8	Limited knowledge of research into the influence of early attachment on childhood and/or adult relationships is present. Focus is mainly on description. Any discussion is of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions.
1	1–4	Knowledge of research into the influence of early attachment on childhood and/or adult relationships is very limited. Discussion is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible content:

- Bowlby's internal working model (IWM) – early attachment provides blueprint/prototype for later attachment; formation of mental representation/schema of first attachment relationship; affects later relationships during childhood and adulthood
- Material on maternal deprivation is creditworthy if made relevant to the question
- attachment type associated with quality of peer relationships in childhood – studies of friendship patterns, bullying, etc.
- relationship between early attachment type and later romantic relationships – the 'love quiz' (Hazan and Shaver)
- relationship between early attachment type and parenting style
- adult attachment interview (Main et al) continuity between early attachment type and adult classification/behaviours – credit knowledge of procedure and coding system (insecure-dismissing, autonomous-secure, insecure-preoccupied, unresolved)
- knowledge of relevant studies, e.g. Kerns; Myron-Wilson and Smith; Zimmerman; Hazan and Shaver; Quinton; Harlow; Freud and Dann; Koluchova; Clarke and Clarke.

Note: that the term 'research' may include theories/explanations and/or studies.

Possible discussion points:

- use of evidence in discussion
- discussion of theory, e.g. Bowlby's IWM and issue of determinism; negative implications of assumption that the relationship is cause and effect
- discussion of underpinning evidence regarding measuring adult attachment type, e.g. difficulty of establishing cause and effect between early attachment history and later relationships
- discussion of use of self-report techniques to assess quality of childhood/adult relationships – subjectivity, social desirability, etc. – as well as retrospective assessment of early attachment patterns
- difficulty of measuring the IWM – hypothetical concept
- counter-evidence, e.g. to suggest that children can recover from deprivation/privation and form effective adult relationships
- ethical issues, e.g. anxiety associated with use of adult attachment interview
- discussion of use of findings from animal studies in this area, e.g. Harlow and difficulty of generalising across species.

Credit other relevant material.



1. **Identify** two behavioural characteristics of depression. [2 marks]

Mark Scheme

Marks for this question: AO1 = 4

For **each** characteristic award marks as follows:

2 marks for a characteristic that is clear, coherent and elaborated

1 mark for a characteristic that is limited/muddled.

Possible characteristics:

- change in activity levels – increased lethargy (lack of energy)/ withdrawal from activities that were once enjoyed (anhedonia); neglecting personal hygiene; increased activity levels/agitation
- disruption to sleep – sleep may reduce (insomnia) or increase (hypersomnia)
- disruption to eating behaviour – increased or decreased eating/weight gain or loss
- aggressive acts – towards others or oneself, e.g. self-harm.

Each of the bullet points above can earn a maximum of 2 marks.

Accept other relevant characteristics.

2. **Outline** one limitation of systematic desensitisation as a treatment for phobias. [3 marks]

Mark Scheme

Marks for this question: AO3 = 3

3 marks for a clear, coherent and detailed outline, using appropriate terminology.

2 marks for an outline which lacks some detail.

1 mark for a very limited/muddled outline.

Possible limitations:

- SD is time-consuming, when compared to alternatives such as flooding, as the person with the phobia needs to be trained in relaxation techniques and gradual exposure can take many sessions
- progress in therapy may not generalise outside of the clinical setting when the person with the phobia must face their fear without the support of the therapist
- may not be appropriate for more generalised 'free-floating' phobias, such as social phobia, where there is no obvious target behaviour so difficult to devise a hierarchy
- 'expense' if justified through reasoned discussion
- alternative treatments if used to illustrate limitations of SD

Credit other valid limitations.

3. **Outline** two cognitive characteristics of obsessive-compulsive disorder. **[4 marks]**

Mark Scheme

Marks for this question: AO1 = 4

For each characteristic award marks as follows:

2 marks for a clear, coherent cognitive characteristic.

1 mark for a limited, muddled cognitive characteristic.

Possible characteristics:

- obsessive thoughts – persistent and intrusive thoughts of, eg germs
- hypervigilance/selective attention – increased awareness of source of obsession in new situations
- insight into irrationality of thoughts/behaviour
- cognitive strategies to deal with obsessions.

Award **1 mark** only for two cognitive characteristics just named.

Accept other valid characteristics.

4. **Outline** and **evaluate** one or more neural explanations of obsessive-compulsive disorder. **[8 marks]**

Mark Scheme

Marks for this question: AO1 = 3 and AO3 = 5

Level	Marks	Description
4	7–8	Knowledge of one or more neural explanations of OCD is accurate with some detail. Evaluation is thorough and effective. Minor detail and/or expansion of argument is sometimes lacking. The answer is clear, coherent and effective. Specialist terminology is used effectively.
3	5–6	Knowledge of one or more neural explanations of OCD is evident but there are occasional inaccuracies/omissions. Evaluation is mostly effective. The answer is mostly clear and organised but occasionally lacks focus. Specialist terminology is used appropriately.
2	3–4	Limited knowledge of one or more neural explanations of OCD is present. Focus is mainly on description. Any evaluation is of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions.
1	1–2	Knowledge of one or more neural explanations of OCD is limited. Evaluation is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible content:

- the role of neurochemicals such as serotonin and dopamine – levels associated with abnormal transmission of mood-related information/obsessive thoughts
- structural deficits – abnormal functioning in the parahippocampal gyrus which processes unpleasant emotions; hyperactivity in the basal ganglia linked to repetitive actions (compulsions); the orbito-frontal cortex 'the worry circuit' – the caudate nucleus-thalamus loop, inability to filter small worries in OCD so worry circuit is overactive
- damage to neural mechanisms due to breakdown of immune functioning, e.g. via Lyme's disease.

Note: that genetic explanations alone should not be credited unless there is an explicit link made between genes and levels of neurotransmitter/structural deficits.

Possible evaluation points:

- evidence to support/contradict the effects of neural mechanisms in OCD
- success of drug treatments, e.g. SSRIs, suggests that low serotonin is a causal factor
- not all patients respond to drug treatment which casts doubt on the explanation's validity
- issue of causation – neurochemical imbalances/structural abnormalities in the brain may be a symptom rather than the cause of the illness
- many neural mechanisms have been identified but these are not always present in all cases
- some studies of abnormal brain functioning, e.g. Aylward, have not been replicated
- comparison with other explanations.

Credit other relevant material.

5. Rob is a sixth form student who has started hearing voices in his head. The voices come often, are usually threatening and make Rob feel frightened. The voices are making it difficult for Rob to complete his homework properly and he is worried about how this may affect his chances of going to university. Rob has not told anyone about his experiences, but his parents and teachers have noticed that he appears distracted, anxious and untidy.

Outline and **evaluate** failure to function adequately and deviation from ideal mental health as definitions of abnormality. **Refer** to the experiences of Rob in your answer. **[16 marks]**

Mark Scheme

Marks for this question: AO1 = 6, AO2 = 4 and AO3 = 6

Level	Marks	Description
4	13–16	Knowledge of failure to function adequately and deviation from ideal mental health is accurate and generally well detailed. Application is effective. Evaluation is thorough and effective. Minor detail and/or expansion of argument is sometimes lacking. The answer is clear, coherent and focused. Specialist terminology is used effectively.
3	9–12	Knowledge of failure to function adequately and deviation from ideal mental health is evident but there are occasional inaccuracies/omissions. Evaluation/application is mostly effective. The answer is mostly clear and organised but occasionally lacks focus. Specialist terminology is used appropriately.
2	5–8	Limited knowledge of failure to function adequately and/or deviation from ideal mental health is present. Focus is mainly on description. Application/evaluation is of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions.
1	1–4	Knowledge of failure to function adequately and/or deviation from ideal mental health is very limited. Application is limited, poorly focussed or absent. Evaluation is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

AO1 content

Failure to function adequately:

- abnormality judged as inability to deal with the demands of everyday living
- behaviour is maladaptive, irrational or dangerous
- behaviour causes personal distress and distress to others.

Deviation from ideal mental health:

- absence of signs of mental health used to judge abnormality
- description of (Jahoda's) criteria – accurate perception of reality; self-actualisation; resistance to stress; positive attitude towards self; autonomy/independence; environmental mastery
- the more criteria someone fails to meet, the more abnormal they are.

Accept other valid points.

AO2 possible application

Failure to function adequately:

- evidence that Rob is not coping with everyday tasks – cannot complete homework; he is untidy
- Rob is causing others' distress – his parents and teachers
- personal distress – feelings of anxiety, he is frightened.

Deviation from ideal mental health:

- Rob's perception of reality is not accurate – hearing voices
- voices are preventing Rob from fulfilling potential/achieving self-actualisation – may affect his chances of going to university.

Accept other relevant application points.

AO3 possible evaluation/discussion points

Failure to function:

- recognises the patient's perspective
- judging person as distressed or distressing relies on subjective assessment
- not all abnormal behaviour is associated with distress/failure to cope eg psychopathy
- not all maladaptive behaviour is an indicator of mental illness.

Deviation from ideal mental health:

- positive, holistic approach to diagnosis
- criteria for mental health are too demanding/unrealistic
- culture bias in some criteria, eg value placed on independence/autonomy
- use of evidence to support/challenge definitions
- comparison/overlap with other definitions – deviation from social norms, statistical infrequency.

Accept other relevant evaluation points.



Paper 2

AQA Psychology



1. **State** one assumption of the cognitive approach. [1 mark]

Mark Scheme

Marks for this question: AO1 = 1

1 mark for stating an appropriate assumption of the cognitive approach.

Possible content:

- internal mental processes can be studied
- mental processes can involve schema
- theoretical and computer models can be used
- it is possible to make inferences about mental processes (eg from models)
- neural mechanisms can be combined with cognitive processes in cognitive neuroscience.

Accept other valid assumptions.

2. Jed was given a detention meaning that he would miss the football match after school. Jed felt extremely angry. Later that day, Jed was called in to the Head of Year's office for kicking his locker at break time. **Identify** and **explain** the defence mechanism Jed was displaying. [3 marks]

Mark Scheme

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

1 mark for identification of displacement.

Plus

1 mark for a brief explanation of displacement.

The focus of a strong emotion is expressed on to a neutral/alternative person or object.

Plus

1 mark for relevant elaboration in the context of the stem.

Jed's anger at the detention/missing the football match is transferred to the locker.

Note: These marks can be awarded independently.

3. **Describe** the ego and superego according to the psychodynamic approach. [4 marks]

Mark Scheme

Marks for this question: AO1 = 4

For each description award:

2 marks: for a clear description of the part of personality with some detail

1 mark: a limited and/or muddled description.

Possible content:

- the ego: rational, balancing the id and superego, reference to 'reality principle', formed between 18mths–3yrs.
- the superego: reference to 'morality principle', acts as the conscience or moral guide, represents the ego ideal/ideal self, based on parental and societal values, formed between 3–6yrs.

Credit other relevant content.

4. **Describe** how Skinner investigated the effect of reinforcement on behaviour. [4 marks]

Mark Scheme

Marks for this question: AO1 = 4

Level	Marks	Description
2	3–4	Knowledge of how Skinner investigated the effect of reinforcement on behaviour is clear and detailed. The answer is generally coherent and accurate with appropriate use of specialist terminology.
1	1–2	Knowledge of how Skinner investigated the effect of reinforcement on behaviour is limited/muddled. Use of specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible content:

- conducted experiments with rats/pigeons
- isolated in a highly controlled environment/Skinner box
- animal deliberately kept underweight
- rats were rewarded with food pellet for pressing a lever/pigeons rewarded with food pellet for pecking a disc (positive reinforcement)
- rats/pigeons had to press lever/peck disc to avoid an unpleasant stimulus, eg an electric shock (negative reinforcement)
- varied schedules of reinforcement
- measured response rate
- credit alternative research by Skinner, eg conditioning of pigeons to play ping-pong
- credit knowledge of how Skinner studied spontaneous recovery, generalisation, discrimination and behaviour-shaping.

Credit other relevant content.

5. **Outline** the behaviourist approach. **Compare** the behaviourist approach with the biological approach. [16 marks]

Mark Scheme

Marks for this question: AO1 = 6 and AO3 = 10

Level	Marks	Description
4	13 - 16	Knowledge of the behaviourist approach is accurate and generally well detailed. Comparison with the biological approach is thorough and effective. Minor detail and/or expansion of argument is sometimes lacking. The answer is clear, coherent and focused. Specialist terminology is used effectively.
3	9 - 12	Knowledge of the behaviourist approach is evident but there are occasional inaccuracies/omissions. Comparison with the biological approach is mostly effective. The answer is mostly clear and organised but occasionally lacks focus. Specialist terminology is used appropriately.
2	5 - 8	Limited knowledge of the behaviourist approach is present. Focus is mainly on description. Any comparison with the biological approach is of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions.
1	1 - 4	Knowledge of the behaviourist approach is very limited. Comparison with the biological approach is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible content - outline:

- basic assumptions of the behaviourist approach
- the concept/theory of classical conditioning
- Pavlov's research
- the concept/theory of operant conditioning
- Skinner's research.

Possible comparisons:

- focus on environmental causes and experience vs focus on internal influences (nature vs nurture). Discussion of the interactionist approach
- approaches to treatment (eg flooding vs drug therapy)
- use of scientific methods
- the issue of determinism
- the issue of reductionism
- use of animal experiments and extrapolation
- contrasting implications (eg blame, responsibility and social stigma).

Note - Use of topic examples to illustrate and elaborate on comparison points should be credited.

Credit other relevant information.



1. **Name** one type of neuron and **briefly explain** its function. [2 marks]

Mark Scheme

Marks for this question: AO1 = 2

1 mark: for naming one type of neuron – Sensory, Motor or Relay (interneuron).

Plus

1 mark: for a clear and coherent explanation of the function of the named neuron.

Possible content:

- sensory neurons: carry messages from the PNS to the CNS; carry information about changes in external and internal environments to the CNS
- motor neurons: carry nerve impulses from the CNS (brain and spinal cord) to effectors (muscles/glands); transmit signals to muscle cells or glands
- relay neurons: carry nerve impulses between sensory/motor/other relay neurons; allow information to pass straight through the spinal cord (spinal reflex).

Note - the function must relate to the type of neuron named.

Credit other relevant content/types of neuron.

2. **Using** an example of a hormone, **outline** the function of the endocrine system. [4 marks]

Mark Scheme

Marks for this question: AO1 = 4

Level	Marks	Description
2	3–4	Using an example of a hormone, the outline of the function of the endocrine system is clear and accurate with some detail. The answer is generally coherent with appropriate use of specialist terminology.
1	1–2	Outline of the function of the endocrine system is present but lacks detail/accuracy. The example is either inappropriate/muddled or absent. The answer as a whole is not clearly expressed. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible content:

- to regulate cell or organ activity within the body and control vital physiological processes in the body, such as heart rate, blood pressure, appetite, sleep and body temperature
- to release hormones/chemical messengers from glands into the bloodstream which then bind with specific receptors in order to regulate the activity of cells or organs in the body
- to release hormones/chemical messengers that regulate biological processes including metabolism, growth and development, reproduction, mood, and response to stress
- adrenaline (produced by the adrenal gland) triggers the fight or flight response and increases heart rate, breathing rate, contracts blood vessels etc
- thyroxine (produced by the thyroid gland) increases heart rate and metabolic rates
- oestrogen (produced by the ovaries) controls the development of female physical features such as the development of female genitalia, breast development, menstruation, etc
- testosterone (produced by the testes) controls the development of male physical features such as the development of male genitalia, facial and body hair growth, deepening of the voice etc.

Note - Maximum 1 mark for only naming a hormone.

Credit other relevant content/examples.

3. **Explain** the process of synaptic transmission. **Refer** to excitation in your answer. [4 marks]

Mark Scheme

Marks for this question: AO1 = 4

Level	Marks	Description
2	3–4	Knowledge of the process of synaptic transmission with reference to excitation is detailed, clear and accurate with use of appropriate specialist terminology.
1	1–2	Knowledge of the process of synaptic transmission with reference to excitation is incomplete/partly accurate. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible content:

- electrical impulses/action potentials reach the presynaptic terminal
- electrical impulses/action potentials trigger release of neurotransmitters from the vesicles
- neurotransmitters diffuse across the synaptic cleft/gap
- these bind with receptors on the postsynaptic membrane
- some neurotransmitters are excitatory others are inhibitory
- the process of summation
- excitation involves stimulation of postsynaptic receptors/depolarisation of the postsynaptic membrane
- the postsynaptic cell is more likely to fire (if the net effect of summation is excitatory/if the charge reaches the threshold).

Credit other relevant content

Note - for 4 marks explanation must describe the process (beginning, middle and end) and must refer to excitation.

Note – up to full marks can be awarded for a well annotated diagram – direction of transmission should be made clear.

4. Describe the divisions of the nervous system. [6 marks]

Mark Scheme

Marks for this question: AO1 = 6

Level	Marks	Description
3	5–6	Knowledge of the divisions of the nervous system is accurate and detailed. The answer is clear and coherent with effective use of terminology.
2	3–4	Knowledge of the divisions of the nervous system is evident but there may be some detail missing. The answer lacks clarity and/or accuracy in places. Use of terminology is inappropriate on occasions.
1	1–2	Knowledge of the divisions of the nervous system is limited or muddled. Use of terminology is either absent or inappropriate.
	0	No relevant content.

Possible content:

- the nervous system is divided into the central and peripheral nervous systems
- the CNS comprises the brain and spinal cord
- the peripheral nervous system is further divided into the somatic nervous system and the autonomic nervous system (ANS)
- the somatic nervous system consists of sensory and motor neurons to carry sensory and motor information to and from the CNS and also enables reflex actions
- the ANS acts largely unconsciously/involuntary
- the ANS is divided into the sympathetic nervous system (SNS) and the parasympathetic nervous system (PNS)
- the SNS prepares us for flight or fight
- the PNS balances the sympathetic nervous system providing 'rest and digest' functions.

Note: content presented in diagrams can be credited.

Credit other relevant material.

5. Kieran completes a quiz in his magazine and announces that he is 'left brained'. "That's just silly", Sam says. "You cannot just be 'left brained', the whole brain works together to carry out functions." "It's not silly!" Kieran replies. "It says here that the left brain is responsible for speech and language."

Discuss research into localisation of function in the brain and/or hemispheric lateralisation. **Refer** to Kieran and Sam's discussion in your answer.. **[16 marks]**

Mark Scheme

Marks for this question: AO1 = 6, AO2 = 4 and AO3 = 6

Level	Marks	Description
4	13–16	Knowledge of localisation of function in the brain and/or hemispheric lateralisation is accurate and generally well detailed. Application is effective. Discussion of hemispheric lateralisation is thorough and effective. Minor detail and/or expansion of the argument is sometimes lacking. The answer is clear, coherent and focused. Specialist terminology is used effectively.
3	9–12	Knowledge of localisation of function in the brain and/or hemispheric lateralisation is evident but there are occasional inaccuracies/omissions. Application and/or discussion is mostly effective. The answer is mostly clear and organised but occasionally lacks focus. Specialist terminology is used appropriately.
2	5–8	Limited knowledge of localisation of function in the brain and/or hemispheric lateralisation is present. Focus is mainly on description. Any application and/or discussion is of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions.
1	1–4	Knowledge of localisation of function in the brain and/or hemispheric lateralisation is very limited. Discussion/application is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible content:

- localisation of functions in the brain such as the somatosensory cortex, motor cortex, primary visual cortex, primary auditory cortex, Broca's area and Wernicke's area and research supporting these functional divisions.
Note – examiners should be aware that candidates may refer to other specific areas such as the hippocampus and amygdala which would be creditworthy
- hemispheric lateralisation refers to the notion that certain functions are principally governed by one side of the brain
- case studies, eg Phineas Gage, Leborgne (Tan), Lelong, etc., or imaging studies suggesting particular functions are dealt with by one hemisphere, eg Fink, Halling et al, 1996, Clarke, Assal & de Tribolet, 1993, etc.
- Sperry's (1968) split brain research studies
- case studies involving damage to the corpus callosum, eg Kim Peek
- Broca's discovery that the speech production area was in the left hemisphere
- Wernicke's discovery that the area for understanding language was in the left hemisphere.

Possible application: - Do not credit application unless it goes beyond material in the stem

- Sam's argument is in line with researchers who suggest that the two hemispheres work together to form most tasks as part of a highly integrated system
- Sam could be referring to the corpus callosum that enables information to be communicated between the two hemispheres
- Kieran is referring to the fact that Broca's area is usually found in the left hemisphere and is considered to play a vital role in speech production. This suggests that language is subject to hemispheric lateralisation
- Kieran is referring to the fact that Wernicke's area is usually found in the left hemisphere and is considered to play a vital role in understanding language. This suggests that language is subject to hemispheric lateralisation.

Possible discussion points:

- gender differences, eg Harast et al (1997)
- lateralisation patterns shift with age, eg Szaflarski et al 2006, with most tasks generally becoming less lateralised in healthy adulthood
- functions such as language are too complex to be assigned to just one area and instead involve networks of brain regions
- support for functional differentiation from aphasia cases used as a counter-argument
- equipotentiality theory – Lashley 1930
- issues with generalising from non-human animals to humans in lesion studies
- findings from plasticity studies that show compensation by undamaged regions on the opposite hemisphere, eg Danelli et al 2013
- issues generalising from case studies or from 'abnormal' patients, eg participants in the split brain research
- discussion of patient J.W. who could speak about information presented to the left or right brain (Turk et al, 2002)
- issues with generalising from studies with small participant numbers.

Credit other relevant material.



Read the item and then answer the questions that follow.

Researchers were interested in the spatial awareness skills of motorists. They decided to investigate a possible relationship between different aspects of spatial awareness. Motorists who had between ten and twelve years of driving experience and held a clean driving licence with no penalty points were asked to complete two sets of tasks.

Set 1: To follow a series of instructions and using a map, to identify various locations correctly. This provided a map reading score for each motorist with a maximum score of 20.

Set 2: To complete a series of practical driving tasks accurately. This involved tasks such as driving between cones, driving within lines and parking inside designated spaces. Each motorist was observed completing the **Set 2** tasks by a single trained observer who rated each performance by giving the driver a rating out of 10.

The following results were obtained.

Table 1: The map reading scores and driver ratings of motorists

Participant driver	Map reading score	Driver rating
1	17	9
2	8	4
3	15	7
4	12	6
5	3	2
6	4	4
7	6	8
8	14	6
9	19	10

1. Should the hypothesis be directional? **Explain** your answer. [2 marks]

Mark Scheme

Marks for this question: AO2 = 2

2 marks for explanation that a non-directional hypothesis is suitable or 'it should not be directional,' (1) as there is no reference to evidence that allows the researchers to prediction the direction of the results (1).

1 mark for a muddled/limited explanation of why the hypothesis should be non-directional or
1 mark for stating non-directional.

2. **Write** a suitable hypothesis for this investigation. [3 marks]

Mark Scheme

Marks for this question: AO2 = 3

3 marks for an appropriate non-directional operationalised hypothesis:

'There is a relationship between the map reading scores and the driving error ratings of motorists'.

2 marks for a non-directional statement with both key variables that lacks clarity or has only one variable operationalised.

1 mark for a muddled statement with some reference to variables.

0 marks for expressions of aim/questions/causal statements or statements with only one condition.

Full credit can be awarded for a hypothesis expressed in a null form.

3. **Briefly outline** one problem of using a single trained observer to rate the participants' driving skills in the practical task. **Briefly discuss how** this data collection method could be modified to improve the reliability of the data collected. [6 marks]

Mark Scheme

Marks for this question: AO2 = 2 and AO3 = 4

Level	Marks	Description
3	5–6	Outline of the problem is clear and coherent. Discussion of how the method could be modified is appropriate and effective. The answer is clear and coherent. Specialist terminology is used effectively. One modification in detail can access this level.
2	3–4	Outline of the problem is clear. Discussion of how the method could be modified is mostly appropriate and effective. There is some appropriate use of specialist terminology.
1	1–2	Outline of the problem is vague/muddled. Discussion of how the method could be modified either lacks detail or is muddled. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible problems:

- Researcher bias – using one observer means objectivity/reliability/validity cannot be checked

Possible modifications:

- Increasing the number of observers of the driving task because then the data is less subject to individual bias – the observations could then be correlated
- Recording the driver performance so that the data is not lost but can be reviewed as often as required.

Credit other relevant information.

4. The researchers decided to analyse the data using a Spearman's rho test. Explain why this is a suitable choice of test for this investigation. [3 marks]

Mark Scheme

Marks for this question: AO2 = 3

Possible content:

- The test determines the strength of a relationship between two variables which is what the researchers were looking for in their initial aim
- The data are in related pairs
- The variables under test are both ratings measured at the ordinal level.

Credit other relevant information

Table 2: Table of critical values for a Spearman's rho test

		Level of significance for a two-tailed test			
		0.10	0.05	0.02	0.01
		Level of significance for a one-tailed test			
		0.05	0.025	0.01	0.005
N=	8	0.643	0.738	0.833	0.881
	9	0.600	0.700	0.783	0.833
	10	0.564	0.648	0.745	0.794

Calculated r_s must EQUAL or EXCEED the critical value for significance at the level shown.

5. After analysis of the data the researchers obtained a calculated value of $r_s = 0.808$. Using the information in Table 2 above, what conclusion can the researchers draw about the relationship between the map reading and driving skills of the motorists? Explain your answer. [4 marks]

Mark Scheme

Marks for this question: AO2 = 2 and AO3 = 2

Level	Marks	Description
2	3–4	Explanation of an appropriate conclusion for this study is clear and mostly accurate. There is appropriate justification of the conclusion with reference to the critical values table. The answer is generally coherent with effective use of specialist terminology.
1	1–2	Some explanation of an appropriate conclusion is evident. There may be some justification of this with reference to the critical values table. The answer lacks accuracy and detail. Use of specialist terminology is either absent or inappropriate.
	0	No relevant content.

Possible content:

Conclusion

- The null hypothesis should be rejected and the alternative hypothesis accepted
- There is a significant (positive) relationship between the map reading ability and the driving ability of the participants
- Drivers who are skilled at map reading are also skilled at driving

Justification

- This relationship is a strong positive one as the calculated value of r_s of 0.808 exceeds the critical value for a two tailed test at $p=0.05$ where $n=9$ of 0.700.

