Mark Scheme (Results)

Summer 2024

Pearson Edexcel

GCE Psychology (9PS0)

Paper 2: Applications of Psychology

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General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.

- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.

- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.

- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.

- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the **candidate's** response is not worthy of credit according to the mark scheme.

- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.

- When examiners are in doubt regarding the application of the mark scheme to a **candidate's** response, the team leader must be consulted.

- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

SECTION A

Clinical Psychology

Question Number	Answer	Mark
1(a)	AO1 (2 marks) Up to two marks for description of the DSM (DSM-IV-TR or DSM-5). For example: • The DSM-5 has three sections, with section II having the classification of the main mental health disorders (1). Within section III, there is a cultural formulation interview guide to help with diagnosis of the disorder (1). Look for other reasonable marking points.	(2)

Question Number	Answer	Mark
1(b)	AO1 (2 marks), AO3 (2 marks) One mark for identification of a strength and a weakness of DSM (AO1). One mark for justification of the strength and the weakness (AO3). For example: Strength - Kim-Cohen et al. (2005) found that the DSM has predictive validity for conduct disorders in children (1) as a larger majority of children who had at least three conduct disorder symptoms at five years old according to DSM had at least one educational difficulty two years later (1). Weakness - The DSM may not be an accurate classification system for mental disorders as patient factors may affect the information the clinician receives (1), as the patient may not tell the clinician certain aspects of their behaviour due to cultural differences or the stigma attached to such behaviours (1). Look for other reasonable marking points.	(4)

Question Number	Answer	Mark
2 (a)	AO2 (2 marks) Two marks for a fully operationalised non-directional (two-tailed) hypothesis. One mark for a partially operationalised non-directional (two-tailed) hypothesis. For example: • There will be a difference in the number of trainee nurses who say they would work in mental health between the 19 trainee nurses who have a family member with a mental health disorder and the 19 who do not (2). • There will be a difference in the number of trainee nurses willing to work in mental health between condition A and condition B (1). Answers must relate to the scenario. Generic answers score 0 marks. Look for other reasonable marking points.	(2)

Question Number	Answer	Mark
2(b)	AO2 (2 marks) One mark for statement of each reason in relation to the scenario. For example: • She had nominal data as she measured whether they would or would not be willing to work in mental health (1). • She had an independent groups design, the trainee nurses either had or did not have a family member with a mental health disorder (1). Answers must relate to the scenario. Generic answers score 0 marks. Look for other reasonable marking points.	(2)

Question Number	Answer						Mark
2(c)	AO2 (4 marks) One mark for accurate completion of O-E column to one decimal place One mark for accurate completion of $(O-E)^2$ column to one decimal place One mark for accurate completion of $(O-E)^2/E$ column to one decimal place One mark for correct answer to one decimal place = 24.8						(4)

		Observed	Expected	O-E	$(O-E)^2$	$(O-E)^2/E$
Condition A: Had a family member with a mental health disorder	Circled **'yes'** would be willing to work in mental health	19	11.5	7.5	56.3	4.9
	Circled **'no'** would not be willing to work in mental health	0	7.5	-7.5	56.3	7.5
Condition B: Did not have a family member with a mental health disorder	Circled **'yes'** would be willing to work in mental health	4	11.5	-7.5	56.3	4.9
	Circled **'no'** would not be willing to work in mental health	15	7.5	7.5	56.3	7.5
				Chi squared =		24.8

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Question Number	Answer	Mark
2(d)	AO2 (1 mark), AO3 (1 mark) One mark for identification of a strength in relation to the scenario (AO2). One mark for justification of the strength (AO3). For example: • Sakura used quantitative data when collecting her results in the form of the number of trainee **nurses who circled 'yes' or 'no' which increases** reliability (1), as the data is objective which means Sakura did not need to use her own opinion when analysing **the trainee nurses' data** so other researchers should find similar results from her data (1). Answers must relate to the scenario. Generic answers score 0 marks. Look for other reasonable marking points.	(2)

Question Number	Answer	Mark
2 (e)	AO2 (1 mark), AO3 (1 mark) One mark for identification of an improvement in relation to the scenario (AO2). One mark for justification of the improvement (AO3). For example: • Sakura could ask the trainee nurses at a variety of different hospitals rather than just her local hospital (1) as this would be more representative of trainee nurses who would be from a wider area and different backgrounds and therefore the results would be more generalisable (1). Answers must relate to the scenario. Generic answers score 0 marks. Look for other reasonable marking points.	(2)

Question Number	Indicative content	Mark
3	AO1 (4 marks), AO3 (4 marks) AO1 Anorexia Nervosa • The cognitive explanation of anorexia nervosa states that those with the disorder develop faulty schemas in their childhood. • Faulty schemas lead to irrational beliefs about how they perceive their bodies as too big. • One distortion is the 'should' which are what those with anorexia think they should or should not do such as they should not eat certain types of food. • Faulty schemas lead to those with anorexia nervosa not eating to lose the weight that they perceive they have. Obsessive-compulsive disorder (OCD) • The cognitive explanation for OCD states that those with the disorder may develop intrusive thoughts that affect their behaviour. • In early childhood the person develops a belief that the world is a threatening place which makes the person anxious. • To reduce anxiety about the world the person may use thought suppression leading to obsessions that may lead to compulsive behaviours to relieve the anxiety. • An example of an intrusive thought is that the house will burn down so the ritual of checking all the lights are off several times reduces this anxiety. Unipolar depression • According to the cognitive explanation people with unipolar depression have cognitive bias and see the world as a negative place. • People with unipolar depression may catastrophise and believe a minor setback is a major setback that cannot be overcome. • Negative self-schemas mean that those with unipolar depression focus on their negative traits and ignore any positive traits. • The negative triad is when those with unipolar depression have a negative view of their future based on their negative view of the world and themselves leading to depression.	(8)

AO3

Anorexia nervosa
- Guardia et al. (2012) found that patients with anorexia did significantly overestimate their ability to pass through a projected aperture on a wall showing they may have distorted thinking about their body.
- There are other explanations for the development of anorexia nervosa such as learning the behaviour from role models on social media so it is not a complete explanation of anorexia nervosa.
- The cognitive explanation has led to cognitive behavioural therapy for those with anorexia which aims to change their eating patterns and schema around their body image so the explanation has a useful application.
- Scott-Van Zeeland et al. (2013) found that those with anorexia had a significant variation in the EPHX2 gene indicating that anorexia nervosa may have a genetic basis.

Obsessive-compulsive disorder (OCD)
- Soreni et al. (2014) found that perfectionism scores were associated with the severity of OCD symptoms in 94 children showing they do have different schemas.
- There are other explanations for the development of OCD such as learning the behaviour from role models on social media so it is not a complete explanation of OCD.
- The cognitive explanation has led to cognitive behavioural therapy for those with OCD which aims to change their obsessive thoughts by challenging them, so the explanation has a useful application.
- Hou et al. (2014) found that patients with OCD had decreased functional connectivity in the occipital lobe, temporal cortex and cerebellum suggesting OCD may have a biological basis.

Unipolar depression.
- Elliot et al. (1997) found that those with depression had an abnormal response to negative feedback which negatively affected their performance, showing their thought processing is different.
- There are other explanations for the development of unipolar depression such as

| | | learning the behaviour from role models on social media so it is not a complete explanation of unipolar depression.
• The cognitive explanation has led to cognitive behavioural therapy for those with unipolar depression which aims to challenge their negative thoughts about themselves, so the explanation has a useful application.
• Zobel et al. (2010) found that there was an association between variations in the FKBP5 gene and vulnerability to unipolar depression, suggesting it may have a genetic basis. | |

Level	Mark	Descriptor
		AO1 (4 marks), AO3 (4 marks) Candidates must demonstrate an equal emphasis between knowledge and understanding vs evaluation/conclusion in their answer.
	0	No rewardable material.
Level 1	1-2 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) A conclusion may be presented, but will be generic and the supporting evidence will be limited. Limited attempt to address the question. (AO3)
Level 2	3-4 Marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a superficial conclusion being made. (AO3)
Level 3	5-6 Marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning leading to a conclusion being presented. Candidates will demonstrate a grasp of competing arguments but evaluation may be imbalanced. (AO3)
Level 4	7-8 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical evaluation, containing logical chains of reasoning throughout. Demonstrates an awareness of competing arguments, presenting a balanced conclusion. (AO3)

Question Number	Indicative content	Mark

4	AO1 (4 marks), AO2 (4 marks)
	
	AO1
	  • Cross cultural research is used to gather detailed data to investigate the similarities and differences in behaviour thoughts and attitudes regarding mental health disorders between different cultures.
	  • The cross cultural research uses participants from a range of different cultures rather than participants from the same culture to get a more holistic idea of how mental health disorders are perceived.
	  • Cross cultural research on mental health disorders aims to move research away from the focus on western, educated, rich democratic cultures.
	  • A variety of research methods could be used within research across different cultures such as experiments, interviews and questionnaires to assess cross-cultural differences.
	
	AO2
	  • After analysing his data Ferenc did find that there were differences between his culture and the other two cultures attitudes towards those with a mental health disorder.
	  • Ferenc is using participants from three different cultures so he may get a more holistic view of people's **attitudes towards those with a mental** health disorder.
	  • As Ferenc is using two cultures within his country and a neighbouring country, he may still only get the view of western cultures.
	  • Ferenc is using a specific research method within his cross-cultural research, a questionnaire to examine attitudes to mental health disorders using open and closed questions.
		(8)

Level	Mark	Descriptor
		AO1 (4 marks), AO2 (4 marks) Candidates must demonstrate an equal emphasis between knowledge and understanding vs application in their answer.
	0	No rewardable material
Level 1	1–2 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) Provides little or no reference to relevant evidence from the context (scientific ideas, processes, techniques and procedures). (AO2)
Level 2	3–4 Marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Discussion is partially developed, but is imbalanced or superficial occasionally supported through the application of relevant evidence from the context (scientific ideas, processes, techniques and procedures). (AO2)
Level 3	5–6 Marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning. Candidates will demonstrate a grasp of competing arguments but discussion may be imbalanced or contain superficial material supported by applying relevant evidence from the context (scientific ideas, processes, techniques and procedures (AO2)
Level 4	7–8 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical balanced discussion, containing logical chains of reasoning. Demonstrates a thorough awareness of competing arguments supported throughout by sustained application of relevant evidence from the context (scientific ideas, processes, techniques or procedures). (AO2)

Question Number	Indicative content	Mark
5	AO1 (8 marks), AO2 (4 marks), AO3 (8 marks) **AO1** - Deviance is when a behaviour is not statistically normal or socially normal and is a socially unacceptable behaviour. - If a behaviour is not within two standard deviations for the population it can be considered statistically abnormal and may be used to diagnose a mental disorder. **When a behaviour has an impact on a person's ability** to carry out their daily life then it can be said to be dysfunctional. - Dysfunction may not be obvious so when it is used to diagnose a mental health disorder the psychiatrist must look at all aspects of the client's life. - Distress can be used to diagnose a mental health disorder if the behaviour causes the person to be upset and there is no logical reason for the person to be upset. - Distress can be used in isolation to diagnose a mental health disorder, as someone could be very upset but not show deviance or danger. - Danger can be used to diagnose someone with a mental health disorder if they are a danger to themselves and their behaviour may cause them harm. **If someone's behaviour puts other people at risk of** serious harm this would be seen as dangerous and used to diagnose someone with a mental health disorder. **AO2** - Most people do not dress up as a cat and meow instead of talk, **so Patti's behaviour is deviant as her partner** does not find it acceptable. - Distress can be used to diagnose Patti, as whilst she is not upset when she thinks she is a cat when she does not think this she does get upset about the effect it has had on her and her partner. - Patti can be said to be dysfunctional as it has impacted on her ability to go to work as well as going out for meals with her partner which she used to do. **Patti's belief that she is a** cat has put her at risk of serious harm as she had to go to hospital after climbing a tree to escape a dog. **AO3** - Using statistical deviance can give an objective measure of when a behaviour is abnormal so is a more scientific, useful approach to diagnosing a mental health disorder than other factors such as distress.	(20)

	- Some behaviours, such as Freerunning are deviant but are not considered a mental health disorder so the use of deviance may not be useful when diagnosing mental disorders. - The use of the 4Ds to diagnose a mental health disorder is useful as it allows clinicians to determine if **the patient's behaviour** requires further investigation using classification systems. - Dysfunction can be a subjective measure as what is dysfunctional to a clinician may not be dysfunctional to the patient so it may not be useful if the patient does not agree with the clinician. - Distress allows the point of view of the client to be heard, as it is based on how distressing they find their behaviour so it is useful when someone else may feel the behaviour is not distressing. - A fifth dimension has been added, that of duration, how long they all last, so just using the 4Ds on their own without looking at duration may not be useful if it is just for a short time. - DSM-IV-TR uses the 4 Ds when diagnosing mental health disorders such as schizophrenia where patients must show deviance, distress and dysfunction showing that they are useful in diagnosing mental health disorders. - Some behaviours, such as motorbike racing may be considered dangerous but are not considered to be a mental health disorder so using danger on its own to diagnose a mental health disorder is not useful. Look for other reasonable marking points.	

Level	Mark	Descriptor
		AO1 (8 marks), AO2 (4 marks), AO3 (8 marks) Candidates must demonstrate an equal emphasis between knowledge and understanding vs judgement/conclusion in their answer. Application to the scenario is capped at maximum 4 marks.
	0	No rewardable material.
Level 1	1–4 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) Provides little or no reference to relevant evidence from the context (scientific ideas, processes, techniques and procedures). (AO2) A judgement/decision may be presented, but will be generic and the supporting evidence will be limited. Limited attempt to address the question. (AO3)
Level 2	5–8 Marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Line(s) of argument occasionally supported through the application of relevant evidence from the context (scientific ideas, processes, techniques and procedures). (AO2) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material leading to a judgement/decision being presented. Candidates will demonstrate a grasp of competing arguments but response may be imbalanced. (AO3)
Level 3	9–12 Marks	Demonstrates accurate knowledge and understanding. (AO1) Line(s) of argument supported by applying relevant evidence from the context (scientific ideas, processes, techniques and procedures). Might demonstrate the ability to integrate and synthesise relevant knowledge. (AO2) Displays a mostly developed and logical argument, containing mostly coherent chains of reasoning. Demonstrates an awareness of competing arguments, presenting a judgement/decision which may be imbalanced. (AO3)
Level 4	13–16 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Line(s) of argument supported throughout by sustained application of relevant evidence from the context (scientific ideas, processes, techniques or procedures). Demonstrates throughout the skills of integrating and synthesising relevant knowledge with consistent linkages to psychological concepts and/or ideas. (AO2) Displays a well-developed and logical argument, containing logical chains of reasoning throughout. Demonstrates an awareness of competing arguments and presents a balanced response, leading to a balanced judgement/decision. (AO3)
Level 5	17-20 Marks	Demonstrates accurate and comprehensive knowledge and understanding. (AO1) Line(s) of argument supported throughout by sustained application of relevant evidence from the context (scientific ideas, processes, techniques or procedures). Demonstrates consistently the skills of integrating and synthesising relevant knowledge with thorough, accurate linkages to psychological concepts and/or ideas. (AO2) Displays a well-developed and logical argument, containing logical chains of reasoning throughout. Demonstrates a full awareness of competing arguments and presents a fully balanced response, leading to an effective nuanced and balanced judgement/decision. (AO3)

Section B

Criminological Psychology

Question Number	Answer	Mark
6 (a)	AO2 (2 marks) Up to two marks for a description of the results in relation to their criminological psychology practical investigation. For example: • More participants said that the unattractive defendant was guilty of the robbery than the attractive defendant (1). There was a significant difference between the number of unattractive and the attractive defendants found guilty as the calculated value for chi-squared was more than the critical value (1). Answers must relate to the criminological psychology practical investigation. Look for other reasonable marking points.	(2)

Question Number	Answer	Mark
6 (b)	AO2 (1 mark), AO3 (1 mark) One mark for identification of a strength in relation to their criminological psychology practical investigation (AO2). One mark for justification of the strength (AO3). For example: • We used a standardised procedure as each participant was asked the same questions, was the defendant guilty or not guilty (1), which increases reliability, as others can replicate our study investigating the influence of defendant attractiveness and check the results are consistent over time (1). Answers must relate to the criminological psychology practical investigation. Look for other reasonable marking points.	(2)

Question Number	Answer	Mark
6 (c)	AO2 (1 mark), AO3 (1 mark) One mark for identification of an improvement in relation to their criminological psychology practical investigation (AO2). One mark for justification of the improvement (AO3). For example: We could have used a video of the attractive and unattractive defendant instead of a picture to increase validity (1), as this would be more realistic as the participants would see the facial expressions of the defendant and witnesses which may affect whether they believe their testimony (1). Answers must relate to the criminological psychology practical investigation. Look for other reasonable marking points.	(2)

Question Number	Answer	Mark
7 (a)	AO2 (2 marks) Up to two marks for a description of volunteer sampling in relation to the scenario. For example: • Saqlain could have put a notice up in the village hall asking for participants for his investigation into eye-witness testimony (1). He would have included the dates and a phone number for participants to contact him about taking part in the experiment on eye-witness testimony (1). Answers must relate to the scenario. Generic answers score 0 marks. Look for other reasonable marking points.	(2)

Question Number	Answer	Mark
7 (b)	AO2 (1 mark), AO3 (1 mark) One mark for identification of a weakness in relation to the scenario (AO2). One mark for justification of the weakness (AO3). For example: • The villagers who volunteered may be interested in police car chases so the sample would be biased (1), which means the results about the **change of 'a' to 'the' would not be representative** of the target population so could not be generalised to all eye-witnesses (1). Answers must relate to the scenario. Generic answers score 0 marks. Look for other reasonable marking points.	(2)

Question Number	Answer	Mark
7 (c)	AO2 (1 mark), AO3 (1 mark) One mark for identification of a strength in relation to the scenario (AO2). One mark for justification of the strength (AO3). For example: • Saqlain used an independent groups design to avoid practice effects as each group only got **asked either 'a' or 'the'** (1), which increases the validity of the results as the participants answers about the gun would not be affected by their answer to the previous question (1). Answers must relate to the scenario. Generic answers score 0 marks. Look for other reasonable marking points.	(2)

Question Number	Indicative content	Mark
8	AO1 (4 marks), AO3 (4 marks) **AO1** • People expect an individual to be a criminal based on a stereotype due to factors such as where they live, their family or how they dress. • Based on an expectation, the individual is treated as though they are a criminal, so may be avoided for example. • The individual notices this behaviour and may internalise what is expected of them so they now see themselves as a criminal and demonstrate criminal behaviour. • Those with low self-esteem are more likely to change their behaviour to fit the expectation others have of them and are more likely to become criminal. **AO3** • Lamb and Crano (2014) found that teenagers who did not take marijuana were 4.4 times more likely to take it a year later if their parents thought they did take it compared to those whose parents thought they did not take it. • The self-fulfilling prophecy can be seen as incomplete as it ignores biological factors that may cause criminal behaviour such as the XYY gene. • Jahoda (1954) found that names affected criminal behaviour, as boys with a name associated with Wednesday had a higher arrest rate than boys with a name associated with Monday. • The self-fulfilling prophecy cannot explain all behaviour as some individuals such as those with high self-esteem, are resistant to the label they are given and so will not become criminals. Look for other reasonable marking points.	(8)

Level	Mark	Descriptor
		AO1 (4 marks), AO3 (4 marks)
		Candidates must demonstrate an equal emphasis between knowledge and understanding vs evaluation/conclusion in their answer.
	0	No rewardable material.
Level 1	1-2 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) A conclusion may be presented, but will be generic and the supporting evidence will be limited. Limited attempt to address the question. (AO3)
Level 2	3-4 Marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a superficial conclusion being made. (AO3)
Level 3	5-6 Marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning leading to a conclusion being presented. Candidates will demonstrate a grasp of competing arguments but evaluation may be imbalanced. (AO3)
Level 4	7-8 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical evaluation, containing logical chains of reasoning throughout. Demonstrates an awareness of competing arguments, presenting a balanced conclusion. (AO3)

Question Number	Indicative content	Mark
9	AO1 (6 marks), AO2 (4 marks), AO3 (6 marks) **AO1** • Anger management programmes are usually conducted by a professional with small groups of offenders over about ten sessions. • Anger management programmes aim to reduce criminal behaviour by allowing the criminals to learn ways to recognise their emotions and to control them. • The first stage is cognitive preparation where the criminals identify situations that provoke their anger. • **The professional will also explore the criminals'** thought patterns in those situations and challenge them. • Coping skills such as relaxation techniques are taught to help calm the physical response to anger. • Criminals will use the relaxation techniques in role plays that replicate situations that cause them to be angry, in a controlled situation. **AO2** • In cognitive preparation the therapist will look at situations where Maxyme felt he had been **disrespected in order to understand Maxyme's** thought patterns. • Maxyme will have his thoughts challenged, such as questioning why he thought the teenager did not like him. • Maxyme will be taught how to breathe in deeply for 3, hold it for 3 and then breathe out slowly for 3 in order to try and calm him down when he feels like starting a fight. • A role play where another criminal pretends to stop Maxyme from escaping with some money will allow Maxyme to practice his coping skills so he can improve on their use. **AO3** • Howells et al. (2005) found that anger management did not significantly improve anger expression or control so the treatment may not be effective. • Anger management may be seen as more effective than drug therapy, as there are no side effects so those having the treatment may be	(16)

	more likely to attend all the sessions and less likely to stop the treatment. • Anger management assumes that criminal behaviour is due to anger, if the criminal behaviour is not due to anger, such as robbery due to needing money, then it may not be effective at reducing criminal behaviour. • Naeem et al.(2009) found that those on a CBT anger management programme were better at controlling their anger and showed less anger towards themselves and others, showing anger management may be an effective treatment. • Anger management programmes have been found to be more effective for those ready to treat their anger, so if Maxyme does not think he has an anger issue the treatment may not be effective in reducing his criminal behaviour. • Henwood et al. (2016) found that those who stayed on an anger management programme had a 56% risk reduction in violent recidivism showing that anger management programmes are an effective form of treatment if they are completed. Look for other reasonable marking points.	

Level	Mark	Descriptor
		AO1 (6 marks), AO2 (4 marks), AO3 (6 marks) Candidates must demonstrate an equal emphasis between knowledge and understanding vs assessment/conclusion in their answer. Application to the context is capped at maximum 4 marks.
	0	No rewardable material.
Level 1	1–4 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) Provides little or no reference to relevant evidence from the context (scientific ideas, processes, techniques and procedures). (AO2) Generic assertions may be presented. Limited attempt to address the question. (AO3)
Level 2	5–8 Marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Line(s) of argument occasionally supported through the application of relevant evidence from the context (scientific ideas, processes, techniques and procedures). (AO2) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a generic or superficial assessment being presented. (AO3)
Level 3	9–12 Marks	Demonstrates accurate knowledge and understanding. (AO1) Line(s) of argument supported by applying relevant evidence from the context (scientific ideas, processes, techniques and procedures). Might demonstrate the ability to integrate and synthesise relevant knowledge. (AO2) Arguments developed using mostly coherent chains of reasoning. leading to an assessment being presented which considers a range of factors. Candidates will demonstrate understanding of competing arguments/factors but unlikely to grasp their significance. The assessment leads to a judgement but this may be imbalanced. (AO3)
Level 4	13–16 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Line(s) of argument supported throughout by sustained application of relevant evidence from the context (scientific ideas, processes, techniques or procedures). Demonstrates the ability to integrate and synthesise relevant knowledge. (AO2) Displays a well-developed and logical assessment, containing logical chains of reasoning throughout. Demonstrates an awareness of the significance of competing arguments/factors leading to a balanced judgement being presented. (AO3)

Child Psychology

Question Number	Answer	Mark
10 (a)	AO2 (2 marks)	(2)
	Up to two marks for a description of the results in relation to their child psychology practical investigation.	
	For example: • More parents who sent their child to nursery said that they felt that nursery was a more positive experience for children compared to those who did not send their children to nursery (1). There was a significant difference in how positive the parents thought nursery was for children as the calculated value of Mann Whitney was less than the critical value (1).	
	Answers must relate to the child psychology practical investigation.	
	Look for other reasonable marking points.	

Question Number	Answer	Mark
10 (b)	AO2 (1 mark), AO3 (1 mark)	(2)
	One mark for identification of a strength in relation to their child psychology practical investigation (AO2). One mark for justification of the strength (AO3).	
	For example:	
	• We used a standardised procedure as each participant was asked the same questions, did they think nursery was a positive or negative experience for children (1), which increases reliability, as others can replicate our study investigating the influence of attending nursery and check the results are consistent over time (1).	
	Answers must relate to the child psychology practical investigation.	
	Look for other reasonable marking points.	

Question Number	Answer	Mark
10 (c)	AO2 (1 mark), AO3 (1 mark) One mark for identification of an improvement in relation to their child psychology practical investigation (AO2). One mark for justification of the improvement (AO3). For example: • We could have asked parents from a range of different nurseries whether their experience was positive instead of a single nursery (1), as this would be more representative of nurseries with different facilities and locations which would make the results more generalisable to all nurseries in the UK (1). Answers must relate to the child psychology practical investigation. Look for other reasonable marking points.	(2)

Question Number	Answer	Mark
11 (a)	AO2 (2 marks) Up to two marks for a description of volunteer sampling in relation to the scenario. For example: • Saqlain could have put a notice up in the village hall asking for participants for his investigation about how much children remembered at different times of the day (1). He would have included the dates and a phone number for parents to contact him about their children taking part in the experiment on the time of day affecting **children's memory** (1). Answers must relate to the scenario. Generic answers score 0 marks. Look for other reasonable marking points.	(2)

Question Number	Answer	Mark
11 (b)	AO2 (1 mark), AO3 (1 mark) One mark for identification of a weakness in relation to the scenario (AO2). One mark for justification of the weakness (AO3). For example: • The villagers who volunteered may be those who know their children have a naturally good memory so the sample would be biased (1), which means the results about whether the time of day affects how much children remember would not be representative of the target population so could not be generalised to all children (1). Answers must relate to the scenario. Generic answers score 0 marks. Look for other reasonable marking points.	(2)

Question Number	Answer	Mark
11 (c)	AO2 (1 mark), AO3 (1 mark) One mark for identification of a strength in relation to the scenario (AO2). One mark for justification of the strength (AO3). For example: • Saqlain used an independent groups design to avoid practice effects as each group only got asked either to read to their child in the morning or the afternoon (1), which increases the validity of the results as the participants answers about the how much they remember would not be affected by being previously exposed to the story (1). Answers must relate to the scenario. Generic answers score 0 marks. Look for other reasonable marking points.	(2)

Question Number	Indicative content	Mark
12	AO1 (4 marks), AO3 (4 marks) AO1 - Autism may be caused by genetics with changes to over 100 genes being recorded in those with autism. - In most people who have autism due to gene mutations the mutation only occurs in one gene such as the SHANK3 gene. - Many of the genes associated with autism affect the production, growth and organisation of neurons within the brain. - Some people with autism have more neurons than other people in the cortex which is involved in social behaviour and emotions. AO3 - Autism is not just caused by genes as other factors such as parental age and birth complications combined with a genetic predisposition **can also increase a person's risk** of having autism. - Sandin et al. (2014) found that the risk of developing autism in a sample of 14,516 Swedish children increased with genetic relatedness of other family members with autism. - The theory of mind offers an alternative explanation for autism, as it is believed people with autism cannot understand that other people have their own beliefs and emotions, so the biological explanation is incomplete. - Wang et al. (2010) concluded that specific genetic variants are involved in shaping the structure and connectivity of areas of the brain, and mutations in them may lead to autism. Look for other reasonable marking points.	(8)

Level	Mark	Descriptor
		AO1 (4 marks), AO3 (4 marks) Candidates must demonstrate an equal emphasis between knowledge and understanding vs evaluation/conclusion in their answer.
	0	No rewardable material.
Level 1	1-2 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) A conclusion may be presented, but will be generic and the supporting evidence will be limited. Limited attempt to address the question. (AO3)
Level 2	3-4 Marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a superficial conclusion being made. (AO3)
Level 3	5-6 Marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning leading to a conclusion being presented. Candidates will demonstrate a grasp of competing arguments but evaluation may be imbalanced. (AO3)
Level 4	7-8 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical evaluation, containing logical chains of reasoning throughout. Demonstrates an awareness of competing arguments, presenting a balanced conclusion. (AO3)

Question Number	Indicative content	Mark
13	AO1 (6 marks), AO2 (4 marks), AO3 (6 marks) **AO1** • The strange situation procedure lasts for twenty minutes and has eight episodes with interaction between a mother, child and stranger. • Each interaction lasts for about three minutes **and unseen observers record the child's** reactions. • The behaviour of the child with the mother is observed at the start of the procedure and when the mother returns to the room which also has a stranger in it. • The behaviour of the children whilst exploring the room and interacting with a stranger was also observed. • Ainsworth found that there were three attachment types and each attachment type had different behaviours in the strange situation. • Securely attached children were upset when the mother left the room and happy to explore the room when the mother was present. **AO2** • Maxyme would have to set up the room used for the parenting class so that there was somewhere he could hide unseen to observe the children and their parents. • He could use both the mothers and the fathers from the parenting class and observe how the children play with the toys in the parenting classroom whilst they are present. • Another nurse may be asked to help Maxime to play the part of the stranger and Maxyme would observe how the children reacted to the stranger when a parent was present. • If Jack was happy to play with the toys in the parenting classroom Maxyme could conclude that he was securely attached to his parent. **AO3** • The strange situation procedure is standardised with the use of the eight episodes therefore it can be said to be effective as Maxyme can replicate previous studies and compare his findings • Research into attachment could be seen as unethical as the child is left alone and it is	(16)

		known that in most cases the child will become upset, so the parents may not be happy to take part in the study reducing its effectiveness.	
		• The strange situation can be said to be an effective method of measuring attachment type as it has been used across a variety of cultures with a number of different researchers and found the same three attachment types.	
		• The strange situation ignores factors such as the temperament of the child so it may not be an effective way of determining causes of the different attachment types.	
		• **Ainsworth's research just looked at the** interactions with the child and the mother so if Maxyme uses the fathers as well then this will increase its effectiveness when looking at the **children's attachment types.**	
		• The strange situation may not be effective in measuring attachment types in everyday life as children are not usually taken to a strange room and then left with a stranger or on their own.	
		Look for other reasonable marking points.	

Level	Mark	Descriptor
		AO1 (6 marks), AO2 (4 marks), AO3 (6 marks) Candidates must demonstrate an equal emphasis between knowledge and understanding vs assessment/conclusion in their answer. Application to the context is capped at maximum 4 marks.
	0	No rewardable material.
Level 1	1–4 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) Provides little or no reference to relevant evidence from the context (scientific ideas, processes, techniques and procedures). (AO2) Generic assertions may be presented. Limited attempt to address the question. (AO3)
Level 2	5–8 Marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Line(s) of argument occasionally supported through the application of relevant evidence from the context (scientific ideas, processes, techniques and procedures). (AO2) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a generic or superficial assessment being presented. (AO3)
Level 3	9–12 Marks	Demonstrates accurate knowledge and understanding. (AO1) Line(s) of argument supported by applying relevant evidence from the context (scientific ideas, processes, techniques and procedures). Might demonstrate the ability to integrate and synthesise relevant knowledge. (AO2) Arguments developed using mostly coherent chains of reasoning. leading to an assessment being presented which considers a range of factors. Candidates will demonstrate understanding of competing arguments/factors but unlikely to grasp their significance. The assessment leads to a judgement but this may be imbalanced. (AO3)
Level 4	13–16 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Line(s) of argument supported throughout by sustained application of relevant evidence from the context (scientific ideas, processes, techniques or procedures). Demonstrates the ability to integrate and synthesise relevant knowledge. (AO2) Displays a well-developed and logical assessment, containing logical chains of reasoning throughout. Demonstrates an awareness of the significance of competing arguments/factors leading to a balanced judgement being presented. (AO3)

Health Psychology

Question Number	Answer	Mark
14 (a)	AO2 (2 marks) Up to two marks for a description of the results in relation to their health psychology practical investigation. For example: • Participants aged 18 to 28 had a more positive attitude towards the use of illegal drugs compared to participants aged 50 to 60 (1). There was a significant difference in attitudes towards drugs between younger and older adults as the calculated value of Mann Whitney was less than the critical value (1). Answers must relate to the health psychology practical investigation. Look for other reasonable marking points.	(2)

Question Number	Answer	Mark
14 (b)	AO2 (1 mark), AO3 (1 mark) One mark for identification of a strength in relation to their health psychology practical investigation (AO2). One mark for justification of the strength (AO3). For example: • We used a standardised procedure as each participant was asked the same questions, about how positive their attitude to illegal drugs was (1), which increases reliability, as others can replicate our study investigating younger and **older people's attitudes** to illegal drugs and check the results are consistent over time (1). Answers must relate to the health psychology practical investigation. Look for other reasonable marking points.	(2)

Question Number	Answer	Mark
14 (c)	AO2 (1 mark), AO3 (1 mark) One mark for identification of an improvement in relation to their health psychology practical investigation (AO2). One mark for justification of the improvement (AO3). For example: • We could have used open questions as well as closed questions for our questionnaire about attitudes to drugs to increase validity (1) as this would allow the younger and older participants to explain their attitudes towards drugs, giving us more detailed data to compare the attitudes of the age groups (1). Answers must relate to the health psychology practical investigation. Look for other reasonable marking points.	(2)

Question Number	Answer	Mark
15 (a)	AO2 (2 marks) Up to two marks for a description of volunteer sampling in relation to the scenario. For example: • Saqlain could have put a notice up in the village hall asking for participants for his investigation into the new anti-drugs campaign (1). He would have included the dates and a phone number for participants to contact him about taking part in the experiment on the anti-drugs campaign (1). Answers must relate to the scenario. Generic answers score 0 marks. Look for other reasonable marking points.	(2)

Question Number	Answer	Mark
15 (b)	AO2 (1 mark), AO3 (1 mark) One mark for identification of a weakness in relation to the scenario (AO2). One mark for justification of the weakness (AO3). For example: • The villagers who volunteered may all already have a negative attitude to drugs (1), which means the results about whether which anti-drugs campaign was more effective may not be representative of the target population so could not be generalised to all people who would watch the campaign (1). Answers must relate to the scenario. Generic answers score 0 marks. Look for other reasonable marking points.	(2)

Question Number	Answer	Mark
15 (c)	AO2 (1 mark), AO3 (1 mark) One mark for identification of a strength in relation to the scenario (AO2). One mark for justification of the strength (AO3). For example: • Saqlain used an independent groups design to avoid practice effects as each group only got to see the video with either fear provoking messages or factual information (1), which increases the validity of the results as the participants answers about the campaign would not be affected by their previous exposure to the other campaign video (1). Answers must relate to the scenario. Generic answers score 0 marks. Look for other reasonable marking points.	(2)

Question Number	Indicative content	Mark

16	AO1 (4 marks), AO3 (4 marks)
	
	AO1
	  • Nicotine replacement therapy releases nicotine into the blood at a lower rate than cigarettes where it travels to nicotine receptors in the brain.
	  • Nicotine replacement therapy uses nicotine gum, patches or tablets to help those with nicotine addiction.
	  • As the person is still getting nicotine it helps control the withdrawal symptoms such as feeling irritable and having trouble sleeping.
	  • The amount of nicotine in the replacement therapy is gradually reduced until eventually the person is weaned off needing nicotine.
	
	AO3
	  • Hajek et al. (2019) found that e cigarettes were more effective at helping people stop smoking cigarettes than nicotine replacement therapy with 18% not smoking a year later compared to 9.9%.
	  • Nicotine replacement therapy does help control withdrawal symptoms so it may be useful in allowing patients to access other therapies to help them stop smoking, such as hypnosis.
	  • Alpert et al. (2012) found that about one third of people who used nicotine replacement therapy had relapsed and started smoking again and it was no more effective in stopping relapse than those who did not have nicotine replacements.
	  • West and Zhou (2007) found the use of nicotine replacement therapy in smokers aged 35-65 years was associated with improved long term abstinence rates from smoking.
	
	Look for other reasonable marking points.
		(8)

Level	Mark	Descriptor
		AO1 (4 marks), AO3 (4 marks) Candidates must demonstrate an equal emphasis between knowledge and understanding vs evaluation/conclusion in their answer.
	0	No rewardable material.
Level 1	1-2 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) A conclusion may be presented, but will be generic and the supporting evidence will be limited. Limited attempt to address the question. (AO3)
Level 2	3-4 Marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a superficial conclusion being made. (AO3)
Level 3	5-6 Marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning leading to a conclusion being presented. Candidates will demonstrate a grasp of competing arguments but evaluation may be imbalanced. (AO3)
Level 4	7-8 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical evaluation, containing logical chains of reasoning throughout. Demonstrates an awareness of competing arguments, presenting a balanced conclusion. (AO3)

Question Number	Indicative content	Mark
17	AO1 (6 marks), AO2 (4 marks), AO3 (6 marks) **AO1** - Social learning theory states that people become addicted because they observe their role models using drugs, such as alcohol. - People pay attention to their role models drinking alcohol due to their role models having certain characteristics such as power. - Once drinking alcohol has been observed the actions are placed in the memory so they can be imitated at an appropriate time. - If the role model is reinforced for drinking alcohol, then the behaviour is more likely to be imitated. - If the person doing the imitating is reinforced once they have imitated the drinking of alcohol then they are more likely to drink alcohol again. - Intrinsic motivation, such as feeling happy after drinking alcohol, can motivate the person to repeat the behaviour and drink more alcohol. **AO2** - Maxyme will have observed his mother drinking alcohol, such as what type of alcohol she drank, and whether she drank out of a bottle and he will imitate that behaviour. **Maxyme's mother may act as a role model for** Maxyme as she has power over him, which can explain why he started to drink alcohol. **Maxyme's friends may have been** positively reinforced when they drank alcohol in the park, such as being seen as cool by other people. - Maxyme is extrinsically motivated to carry on drinking as he is reinforced when his friends say he is more fun after he has had a drink. **AO3** - Bandura, Ross and Ross (1961) found that children will imitate the aggressive actions of an adult towards a Bobo doll, so social learning theory is a credible explanation of addiction to alcohol. - Studies such as Bandura, Ross and Ross (1961) studied social learning theory in children, so it may not be an effective explanation of addiction in adults.	(16)

	- Social learning theory is a more complete explanation of addiction than operant conditioning because it focuses on cognitive processes as well as reinforcement. - Social learning theory focuses on nurture and ignores nature, such as genes, when explaining addiction so it is not a complete explanation of why people become addicted to alcohol. - Social leaning theory can better explain why people start to drink alcohol compared to classical conditioning so it is a more effective explanation of addiction. - Mundt et al. (2012) found that adolescents chose friends with similar rates of drinking alcohol, rather than being influenced by friends to drink alcohol, so social learning theory may not explain alcohol addiction. Look for other reasonable marking points.	

Level	Mark	Descriptor
		AO1 (6 marks), AO2 (4 marks), AO3 (6 marks) Candidates must demonstrate an equal emphasis between knowledge and understanding vs assessment/conclusion in their answer. Application to the context is capped at maximum 4 marks.
	0	No rewardable material.
Level 1	1–4 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) Provides little or no reference to relevant evidence from the context (scientific ideas, processes, techniques and procedures). (AO2) Generic assertions may be presented. Limited attempt to address the question. (AO3)
Level 2	5–8 Marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Line(s) of argument occasionally supported through the application of relevant evidence from the context (scientific ideas, processes, techniques and procedures). (AO2) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a generic or superficial assessment being presented. (AO3)
Level 3	9–12 Marks	Demonstrates accurate knowledge and understanding. (AO1) Line(s) of argument supported by applying relevant evidence from the context (scientific ideas, processes, techniques and procedures). Might demonstrate the ability to integrate and synthesise relevant knowledge. (AO2) Arguments developed using mostly coherent chains of reasoning, leading to an assessment being presented which considers a range of factors. Candidates will demonstrate understanding of competing arguments/factors but unlikely to grasp their significance. The assessment leads to a judgement but this may be imbalanced. (AO3)
Level 4	13–16 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Line(s) of argument supported throughout by sustained application of relevant evidence from the context (scientific ideas, processes, techniques or procedures). Demonstrates the ability to integrate and synthesise relevant knowledge. (AO2) Displays a well-developed and logical assessment, containing logical chains of reasoning throughout. Demonstrates an awareness of the significance of competing arguments/factors leading to a balanced judgement being presented. (AO3)