

PEARSON EDEXCEL IAL PSYCHOLOGY • YPS01

PSYCHOLOGY



EXAM QUESTION PACK

PSYCHOLOGICAL SKILLS

SCORE

/334

PERCENTAGE

%

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Q1.

Haruto is conducting an ethnographic fieldwork study on the social behaviours of children in a remote community. He is living within the remote community for one year. He uses observations and interviews with the children, their families and the wider community to gather qualitative data.

Haruto is interested in how the children communicate with each other and the adults around them. He is also studying the ways that the children play and learn new skills within the community.

(a) State **two** reasons why Haruto may have chosen to gather qualitative data in his study.

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(b) Describe how Haruto could use a naturalistic observation within his study.

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(c) Explain **one** way that Haruto could improve the reliability of his study.

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(Total for question = 6 marks)

Q2.

Troy investigated the relationship between bullying behaviour and a person's self-esteem. He collected self-report data using a questionnaire. Six respondents were asked closed-ended questions about their behaviour towards others and also closed-ended questions about self-esteem.

Troy calculated scores for behaviour towards others out of 20, with 0 being no indication of bullying behaviour and 20 being a strong indication of bullying behaviour. He scored the answers about self-esteem out of 20, with 0 being very low self-esteem and 20 being very high self-esteem.

Troy used a Spearman's rank test to find out if his results were significant. His results are shown in **Table 2**.

(a) Calculate the Spearman's rank correlation coefficient from the data shown in **Table 2**.

You must show your calculations by substituting into the formula.

You **must** give your answer to **three** decimal places.

You can use the formulae and statistical tables.

(4)

Score for bullying behaviour (out of 20)	Rank 1	Score for self-esteem (out of 20)	Rank 2	d	d^2
18	5	4	1	4	
9	2	13	4	-2	
14	3	9	3	0	
2	1	18	6	-5	
19	6	17	5	1	
17	4	8	2	2	
Total for d^2					

Table 2

Space for calculations

Spearman's rank correlation coefficient

(b) State, using the data from Table 2, whether Troy's results are significant for a two-tailed test at $P \leq 0.05$.

You can use the formulae and statistical tables.

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(c) Give **one** conclusion that Troy could make from his investigation.

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(Total for question = 6 marks)

Q3.

Iram investigated whether there was a difference in the recall of words for Condition A and Condition B.

- Condition A: Three minutes to learn 20 words about living things, such as tree, kitten and elephant.
- Condition B: Three minutes to learn 20 words about non-living things, such as brush, glass and box.

She gathered eight participants for her experiment. Each participant took part in both conditions.

Iram recorded the number of words correctly recalled by each participant. She used a Wilcoxon signed ranks test to find out if her results were significant.

(a) State the fully operationalised dependent variable (DV) for Iram's experiment.

(1)

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(b) Iram analysed her data using a Wilcoxon signed ranks test. Calculate the T value for the data gathered by Iram by completing **Table 1**.

You can use the formulae and statistical tables.

You **must** show your working out.

(4)

Participant	Condition A: Words about living things	Condition B: Words about non-living things	Difference	Ranked difference
A	11	15		
B	14	12		
C	9	11		
D	12	14		
E	14	13		
F	16	16		
G	13	9		
H	17	14		

Table 1

Space for calculations

T = ...

(c) State, using the data, whether Iram's results are significant for a one-tailed test at $P \leq 0.05$.

You can use the formulae and statistical tables.

(1)

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(d) Calculate the range for the number of words about living things correctly recalled by participants in Condition A.

(1)

Space for calculations

Range:

(e) Iram wanted to improve her experiment. She decided to use two new lists of words about living and non-living things, where all of the words were of an equal length.

Justify how changing the words could improve the validity of Iram's experiment.

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(Total for question = 8 marks)

Q4.

Daisy wanted to use a correlational research method to investigate whether aggression and exposure to media violence were linked. She decided to use a questionnaire to gather her data.

(a) Give **one** closed question Daisy could use in her questionnaire.

(1)

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(b) Daisy intended to gather a sample of participants by visiting a large shopping centre and asking anyone who is available if they would answer her questions.

Identify the sampling technique that Daisy intended to use.

(1)

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(c) Daisy completed her investigation and analysed her data. She scored responses to the questionnaires for aggression, with a score of 20 indicating very aggressive. Daisy also scored

the exposure to media violence, with a score of 20 indicating significant exposure to media violence.

Calculate the Spearman's rank correlation coefficient for the data gathered by Daisy by completing **Table 2**.

You can use the formulae and statistical tables.

You **must** show your working out and give your answer to **three** decimal places.

(4)

Score for aggression out of 20	Rank 1	Score for exposure to media violence out of 20	Rank 2	<i>d</i>	<i>d</i> ²
9	4	10	4		
15	7	13	6		
14	6	18	8		
8	3	5	1		
19	8	14	7		
3	1	7	2		
11	5	9	3		
4	2	11	5		
Total for <i>d</i> ²					

Table 2

Space for calculations

Spearman's rank correlation coefficient

(d) Interpret the Spearman's rank correlation coefficient from (c) in terms of the strength **and** direction for Daisy's investigation.

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(e) Explain **one** weakness with Daisy using a correlational research method to investigate exposure to media violence and aggression.

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(Total for question = 10 marks)

Q5.

Wayne wants to use a non-participant covert observation to investigate if males or females demonstrate more pro-social helping behaviour. He asks a confederate to act as an elderly lady who will drop her shopping on a busy street.

(a) Describe how Wayne could carry out his non-participant covert observation.

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(b) Explain **one** strength of Wayne using an observation to investigate the pro-social helping behaviour of males and females.

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(Total for question = 6 marks)

Q6.

Sandeep wants to investigate whether teenage boys consider themselves to have more male or female role models.

Sandeep will read three research reports about role models and teenage boys. She plans to use a questionnaire with boys aged 13 years old to 19 years old.

(a) Identify how Sandeep will gather her primary data.

(1)

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(b) Describe how Sandeep could design a questionnaire to gather quantitative **and** qualitative data.

(4)

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(c) Explain, using social learning theory, what Sandeep is most likely to find from her investigation.

(2)

(Total for question = 7 marks)

Q7.

Bao tested the effectiveness of aromatherapy in reducing anxiety.

Aromatherapy is the use of scented oils, for example in massage, candles or bathing products, to help improve physical and emotional health.

Bao asked eight participants to record the number of anxiety attacks they had each month for two months. During the first month the participants did not use aromatherapy, during the second month the participants did use aromatherapy.

(a) Calculate the Wilcoxon Signed Ranks test for Bao's data shown in **Table 2**.

You can use the formulae and statistical tables.

(2)

Participant	Month one	Month two	Difference	Ranked difference
A	24	19	5	7
B	21	18	3	5.5
C	18	16	2	4
D	20	14	6	8
E	15	16	-1	2
F	17	16	1	2
G	11	12	-1	2
H	14	17	-3	5.5

Table 2

Space for calculations

T value

(b) Determine, with reference to the data, whether Bao's results are significant at $P \leq 0.01$ for a one-tailed (directional) test.

You can use the critical values table.

(1)

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(c) Explain **one** conclusion that can be made from the results of Bao's investigation.

(2)

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(Total for question = 5 marks)

Q8.

Bonique intends to research the effectiveness of reinforcement and punishment in shaping children's behaviour. She must meet the requirements of the UNCRC (1989) and BPS Code of Ethics and Conduct (2009) in her research.

(a) Describe how the UNCRC (1989) right to participation could be met in Bonique's research.

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(b) Explain **two** ethical requirements for the protection of participants that Bonique should consider when designing her research.

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(Total for question = 6 marks)

Q9.

Lexy plans to research whether the amount of positive reinforcement received is related to the engagement in homework shown by children.

Lexy decides to use a questionnaire to gather her data. She posts a link to her questionnaire on several online forums that are used only by parents and teachers. Lexy asks for anyone who has time, to complete her questionnaire. She states that the questionnaire will be anonymous.

(a) Give **one** reason why Lexy may have stated that the questionnaire will be anonymous.

(1)

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(b) Describe **one** reason why Lexy may have chosen to sample parents and teachers in her research about positive reinforcement.

(2)

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(c) Give **two** closed-ended questions that Lexy could use in her questionnaire to research the use of positive reinforcement.

(2)

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(d) Lexy completed her research and analysed the data from the questionnaires.

Calculate the Spearman's rank correlation coefficient for the data gathered by Lexy by completing **Table 1**.

You can use the formulae and statistical tables.

You must show your working out and give your answer to three decimal places.

(4)

Number of times positive reinforcement is given in a day	Rank 1	Number of hours spent on homework in a day	Rank 2	d	d^2
8	2	1	2		
9	3.5	1	2		
4	1	2	5		
12	6	1	2		
16	7	3	7.5		
11	5	2	5		
9	3.5	3	7.5		
17	8	2	5		
Total for d^2					

Table 1

Space for calculations

Spearman’s rank correlation coefficient

(e) Determine, with reference to the data, whether Lexy's results are significant at $p\leq0.05$ for a two-tailed (non-directional) test.

You can use the critical values tables.

(1)

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(Total for question = 10 marks)

Assess how far psychological research can be considered ethical.

(20)

(Total for question = 20 marks)

Q11.

Assess how far psychological research has met ethical considerations.

(Total for question = 20 marks)

Q12.

Assess the extent to which psychological knowledge can be used for social control.

(Total for question = 20 marks)

Q13.

Assess the use of psychological knowledge in society.

(Total for question = 20 marks)

Q14.

Assess whether psychology can be considered a science.

(Total for question = 20 marks)

Q15.

Assess whether reductionism could be considered beneficial for psychology.

(Total for question = 20 marks)

Q16.

Ronald used a correlational research method to investigate the relationship between eating chocolate and depressive symptoms. He asked 10 participants to record the total grams of chocolate they ate over seven days and also self-rate their depressive symptoms each day for the seven days.

Depressive symptoms were scored on a scale of 0 (no symptoms) to 10 (continuous symptoms). Ronald then calculated the mean score for depressive symptoms for each participant.

The data collected by Ronald is shown in **Table 1**.

Participant	Total grams of chocolate eaten in a seven-day period	Mean score for self-rated depressive symptoms
A	80	9
B	200	5
C	240	4
D	200	5
E	100	8
F	180	6
G	300	2
H	140	6
I	60	9
J	280	2

Table 1

(a) Calculate, using the data in **Table 1**, the percentage of participants who recorded eating 200 grams of chocolate or less, as a percentage of all participants.

(1)

Space for calculations

Percentage

(b) Calculate, using the data in **Table 1**, the median score for the total grams of chocolate eaten by the participants in the seven-day period.

(1)

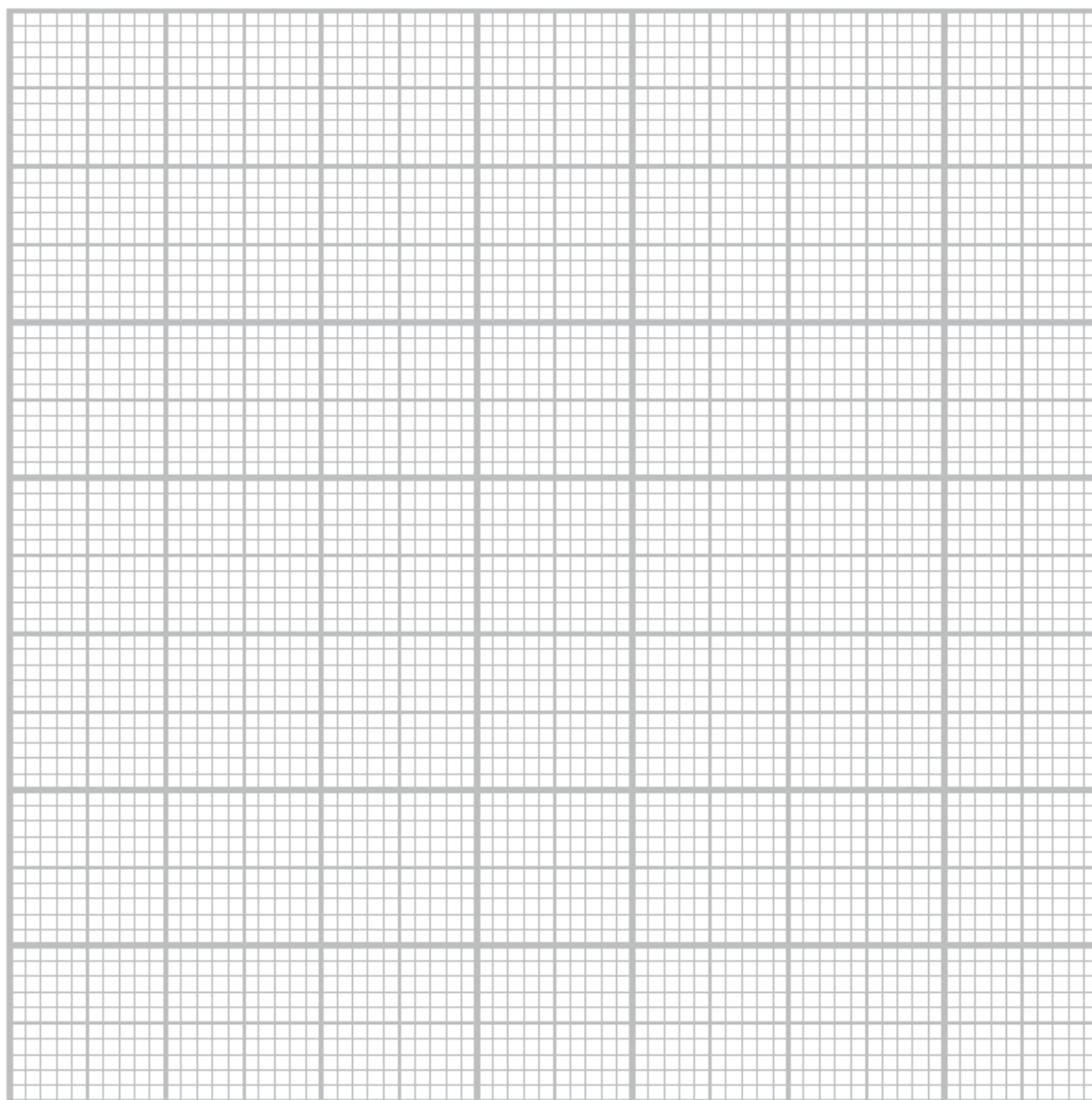
Space for calculations

Median

(c) Draw a scatter diagram for the data shown in **Table 1**.

(3)

Title



(d) Interpret the strength **and** direction of the correlation between eating chocolate and depressive symptoms shown in your scatter diagram in (c).

(2)

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(Total for question = 7 marks)

Q17.

Jamie investigated gender differences in obedience by observing males and females at a train station. Jamie wanted to see if they would follow an instruction announced loudly over a speaker that said, “passengers must not run on the platform when the train arrives”.

Jamie counted how many males and females did or did not run when the arrival of their train was announced.

Jamie used a chi-squared test to find out if the results were significant.

(a) Calculate the chi-squared for the data gathered by Jamie by completing **Table 1**.

The formulae and statistical tables can be found at the front of the paper.

Your answers should **all** be correct to **two** decimal places.

(4)

		Observed	Expected	O-E	(O-E) ²	(O-E) ² /E
Males	Ran on the platform	41	38.03			
	Did not run on the platform	21	23.97			
Females	Ran on the platform	51	53.97			
	Did not run on the platform	37	34.03			
				Chi-squared =		

Table 1

Space for calculations

(b) State, using the data, whether Jamie's results are significant for a two-tailed test at $P \leq 0.025$ where $df = 1$.

The formulae and statistical tables can be found at the front of the paper.

(1)

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(c) Give **one** conclusion that Jamie could make from the data gathered from his investigation. (1)

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(Total for question = 6 marks)

Q18.

Lisa conducted an observation of children's interactions during their break times at school. She wanted to find out if there was a difference between girls' and boys' reliance on older children to scaffold their play.

Lisa recorded whether the younger girls' and boys' first choice of play was with their peers or older children.

The results of her investigation are shown in **Table 1**.

	Played with their peers first	Played with older children first
Girls	18	9
Boys	10	12

Table 1

(a) Calculate the ratio of girls to boys that played with their peers.

You **must** give your answer in the lowest form.

(1)

Space for calculations

Ratio

(b) Calculate the chi-squared for the data gathered by Lisa in her observation by completing **Table 2**.

Your answers should **all** be correct to **two** decimal places.

(4)

		Observed	Expected	O-E	(O-E) ²	(O-E) ² /E
Played with their peers first	Girls	18	15.43			
	Boys	10	12.57			
Played with older children first	Girls	9	11.57			
	Boys	12	9.43			
				Chi-squared =		

Table 2

Space for calculations

(c) Explain, using the BPS Code of Ethics and Conduct (2009), how Lisa could have ensured she had informed consent for her observation.

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(Total for question = 7 marks)

Q19.

Ben investigated whether television programmes portrayed gender stereotypes for females and males. He conducted a content analysis on four television programmes.

Ben tallied the number of stereotypical or non-stereotypical female and male characters in each programme.

The results are shown in **Table 1**.

Television programme	Number of stereotypical female characters	Number of non-stereotypical female characters	Number of stereotypical male characters	Number of non-stereotypical male characters
A	### /	///	### ###	//
B	### ###	###	###	//
C	### //	###	###	###
D	###	### ///	### /	///

Table 1

(a) Calculate the ratio of female to male stereotypical characters recorded by Ben in his content analysis.

You must give your answer in the lowest form.

(1)

Space for calculations

Ratio

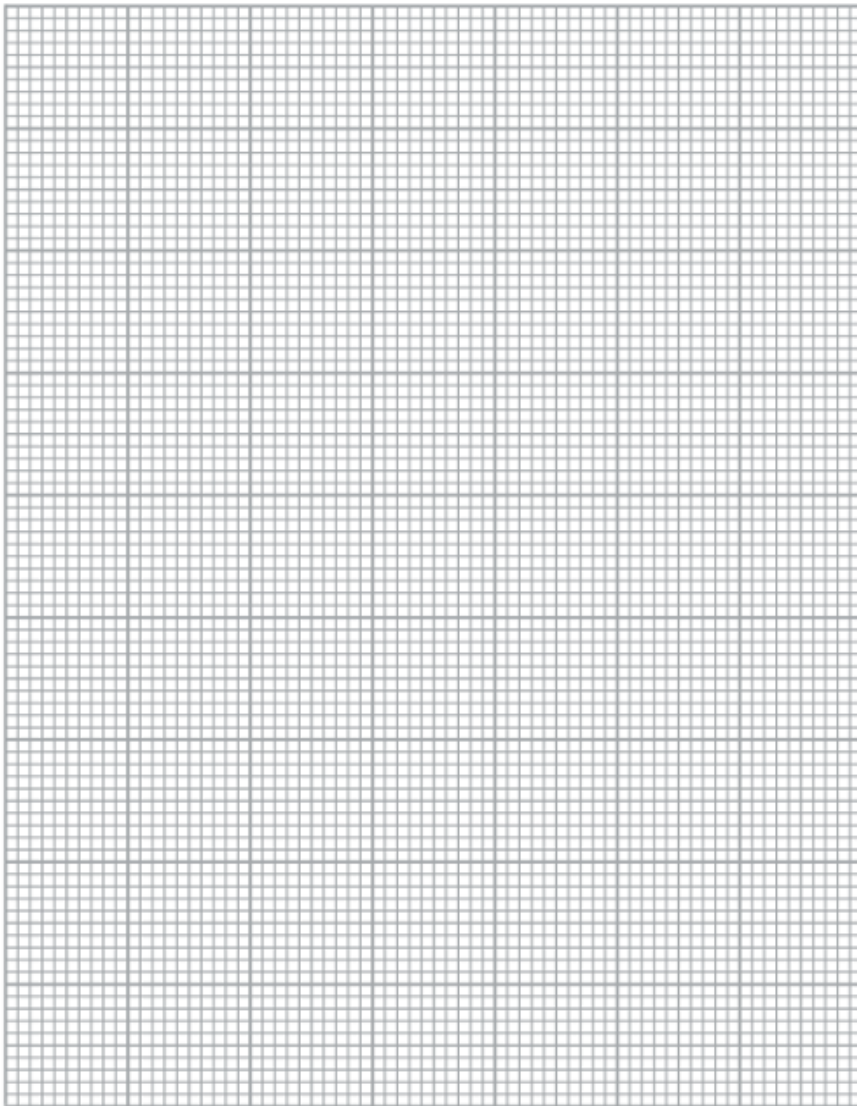
(b) Draw a bar chart to show the data from **Table 1** for non-stereotypical female characters in each television programme.

(3)

Title

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(Total for question = 4 marks)

Q20.

Brian is investigating the impact of noise on short-term memory recall. He has gathered a sample of 20 participants to take part in his research. He plans to use a laboratory experiment using a repeated measures design.

(a) Describe a procedure that could be used by Brian for his investigation about the impact of noise on short-term memory recall.

(4)

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(b) Explain **one** strength of Brian gathering primary data for his investigation about the impact of noise on short-term memory recall.

[illegible]

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Q21.

Zhi intends to use a longitudinal research method to investigate the influence of parenting styles on the educational achievement of children. She plans to gather a sample of 20 families to study over a five-year time period. Zhi has decided to sample families with children currently aged six years old.

(a) Describe how Zhi could use a volunteer sampling technique to gather the families for her investigation.

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(b) Explain **one** improvement that Zhi could make to the sample of families chosen for her investigation.

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(Total for question = 4 marks)

Q22.

Ling is investigating the impact of parenting styles on infant attachment. She has gathered nine

peer-reviewed, published articles. The articles include in-depth, qualitative data from parents about their parenting styles and infant behaviours.

(a) Describe how Ling could use thematic analysis to analyse the qualitative data in the articles.

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(b) Explain **one** improvement that Ling could make to her investigation.

(2)

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(Total for question = 4 marks)

Q23.

One key question for society is the implication for treating offenders if aggression is found to be a result of innate biological factors rather than choice.

Legal systems are often based on the idea that individuals have free will, so have acted out of choice, so we should punish them for their actions. Some biological theories suggest that aggression is innately determined, and actions may not be a choice, so treatments may be more appropriate for offenders.

In 1966 Charles Whitman randomly fired gun shots at people, killing a total of 16 and wounding 31 others. It was discovered he had a brain tumour that may have affected his amygdala,

potentially resulting in an inability to control his emotions and actions.

Dabbs et al. (1995) studied 692 male prisoners and found high levels of testosterone in those who committed violent crimes, which could indicate a link between aggression and increased testosterone levels.

Discuss the key question of the implication for treating offenders if aggression is found to be a result of innate biological factors rather than choice. You should use concepts, theories and/or research studied in your psychology course.

You must make reference to the context in your answer.

(8)

(Total for question = 8 marks)

Q24.

One key question for society is whether bullying in the workplace can be reduced through improved working relationships.

Fast and Chen (2009) claimed that workplace aggression appeared to be driven by ego defensiveness, when someone in power felt a sense of incompetence in their role. They claimed that this aggressiveness was eliminated when the individual's sense of self-worth was boosted.

It could be suggested that the nature of the relationships between people in the workplace is important in reducing experiences of bullying. Findings from a survey by O'Moore and Lynch (2007) showed that 72% of non-bullied respondents reported their work environment as friendly, but only 47% of bullied respondents reported their work environment as friendly.

Discuss the key question of whether bullying in the workplace can be reduced through improved working relationships. You should use concepts, theories and/or research studied in your psychology course.

You must make reference to the context in your answer.

(Total for question = 8 marks)

Q25.

One key question for society is whether knowledge of psychology can inform interventions for

internet addiction.

Internet addiction could be explained as spending many hours on non-work based multiple activities on computers, mobile devices, the internet and/or video games.

Cash et al. (2012) suggested internet addiction could include an inability to control time spent on digital technology, with a need for more time to achieve a desired mood. The user is unable to stop their internet use even when family conflict, a poor social life and negative employment or education consequences arise. They claimed there can be withdrawal symptoms when not using the internet.

Greenfield (2011) suggested that internet applications often use a variable ratio reinforcement schedule, where online activities give unpredictable and variable reward structures. The reward may be intensified when combined with mood enhancing content.

Discuss the key question of whether knowledge of psychology can inform interventions for internet addiction. You should use concepts, theories and/or research studied in your psychology course.

You must make reference to the context in your answer.

(Total for question = 8 marks)

Q26.

One key question for society is whether psychological knowledge can help explain the onset and symptoms of Alzheimer's disease.

Alzheimer's disease is a neurological disorder characterised by memory loss, concentration loss, confusion, and changes in mood. These deteriorate as the disease progresses.

Becker (1988) claimed that memory loss associated with Alzheimer's disease may have multiple cognitive components. Working memory appears to be impaired due to failures in the central executive system. Memory impairments may also be due to poor encoding.

Schwindt and Black (2009) studied how the medial temporal lobe could play a role in Alzheimer's disease. They conducted a meta-analysis of fMRI studies on patients with Alzheimer's disease compared to normal controls. They concluded that Alzheimer's disease patients show decreased activation in the medial temporal lobe.

Discuss the key question of whether psychological knowledge can help explain the onset and symptoms of Alzheimer's disease. You should use concepts, theories and/or research studied in your psychology course.

You **must** make reference to the context in your answer.

(Total for question = 8 marks)

Q27.

One key question for society is whether psychological knowledge can help in the understanding of factors that influence social development.

Social development helps children engage and take part in social situations such as at home, at school and making friends. We can develop our identity, gender and culture through the interactions with the world around us.

Adler and Adler (1998) studied children in the United States. They found that friends were very important, but some groups gained a higher status than others and certain members of the group had more power and influence than others.

Some theories may suggest people are continuously presented with media messages and media content. This media could be manipulative, such as propaganda; or negative, as seen in concerns about media violence and aggression; but can also share positive messages, such as learning and educational television programmes made for children.

Discuss the key question of whether psychological knowledge can help in the understanding of factors that influence social development. You should use concepts, theories and/or research studied in your psychology course.

You **must** make reference to the context in your answer.

(Total for question = 8 marks)

Q28.

One key question for society is whether the use of animals for psychological research is ethically appropriate.

Harlow (1965) studied the effects of total social isolation by housing rhesus monkeys from birth until 3, 6, or 12 months old in stainless-steel chambers with no human or animal contact. While Harlow was able to determine the impact of social isolation on development, it is questionable whether the findings truly benefitted society.

van den Oever et al. (2008) created an addiction to heroin in rats to look at the effect of cues that can trigger addictive behaviours and habits. They wanted to develop a drug therapy so that, if recovering addicts encountered cues, they would not relapse and return to taking heroin. The researchers felt the benefits to society outweighed the cost to the rats.

Discuss the key question of whether the use of animals for psychological research is ethically appropriate. You should use concepts, theories and/or research studied in your psychology

course.

You must make reference to the context in your answer.

(Total for question = 8 marks)

Q29.

One key question for society is whether treatment should be offered by airlines to passengers who have a phobia of flying.

A phobia is a clinically diagnosed overwhelming and extreme fear. Treatment for phobias is usually accessed through mental health services. Some major airports and airlines also offer treatment programmes to help passengers with fears and phobias of flying. Most of these require the passenger to pay for the treatment programme and the treatments may only be a one-day course or be offered online.

Exposure therapy is when a patient confronts the fear-inducing situation until they are able to remain calm. Rothbaum et al. (2006) conducted clinical trials of virtual reality exposure therapy and compared it to standard exposure therapy. At 6 and 12 months after treatment, they found that more than 70% of the participants from both treatment groups were still able to take flights. This suggests that a phobia of flying can be reduced using clinical therapies.

Discuss the key question of whether treatment should be offered by airlines to passengers who have a phobia of flying. You should use concepts, theories and/or research studied in learning theories and clinical psychology.

You must make reference to the context in your answer.

(Total for question = 8 marks)

Q30.

Evaluate whether gender issues influence psychological research.

(Total for question = 20 marks)

Q31.

Psychological research can be conducted using experimental methods.

Explain **one** strength and **one** weakness of using a field experiment when conducting psychological research.

Strength

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Weakness

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(Total for question = 4 marks)

Q32.

Poppy is designing a laboratory experiment to test conformity to a majority group. She intends to replicate the procedure used by Asch (1951) for his research into conformity using lines. Poppy will increase the number of participants to three per experiment and the number of confederates to 10. Poppy has a total of nine participants, so plans to replicate her experiment three times.

Each experiment consists of 20 trials where the three participants have to state their answer for

each slide. There are 20 different slides, each with three possible answers. In all trials, the 10 confederates will give the same, previously agreed, incorrect response.

Explain **three** control issues that Poppy would need to plan for when designing her laboratory experiment.

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(Total for question = 6 marks)

Q33.

Rabia plans to conduct research into the effects of testosterone on aggressive behaviours in rats. Her research will involve a medical procedure on male rats to reduce their testosterone levels. Rabia will ensure that her research meets the requirements of the Animals (Scientific

Procedures) Act 1986 and Home Office Regulations.

Explain **three** ethical considerations Rabia would need to consider when conducting her research with rats.

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(Total for question = 6 marks)

Q34.

When researching psychological topics, a researcher will need to consider control issues in the research.

(a) Explain how a researcher may attempt to overcome order effects when conducting

psychological research.

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(b) Explain how a researcher may attempt to overcome social desirability when conducting psychological research.

(2)

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(Total for question = 4 marks)

Q35.

Samad researched memory using a case study method with a patient who had severe memory problems. Over a period of five years he made notes about the patient during their meetings, recording any change to her memory processes.

Samad also conducted some experiments with the patient, testing her long-term memory recall. He included several fMRI brain scans taken at different times over the last five years in his case study.

(a) Explain **one** weakness of Samad using a case study method for his research of memory.

(2)

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(b) Explain **two** strengths of Samad using a case study method for his research of memory.

(4)

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(Total for question = 6 marks)

Q36.

Rene is conducting a case study about long-term memory loss in a 27 year old patient, who was in a recent sailing accident. The patient can remember information from early childhood up to being 24 years old but cannot remember anything from the last three years.

Rene plans to visit the patient every day for three months and conduct activities and discussions

to gather data about the patient's long-term memory loss.

Explain **three** weaknesses of Rene using a case study method to investigate the patient's long-term memory loss.

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(Total for question = 6 marks)

Q37.

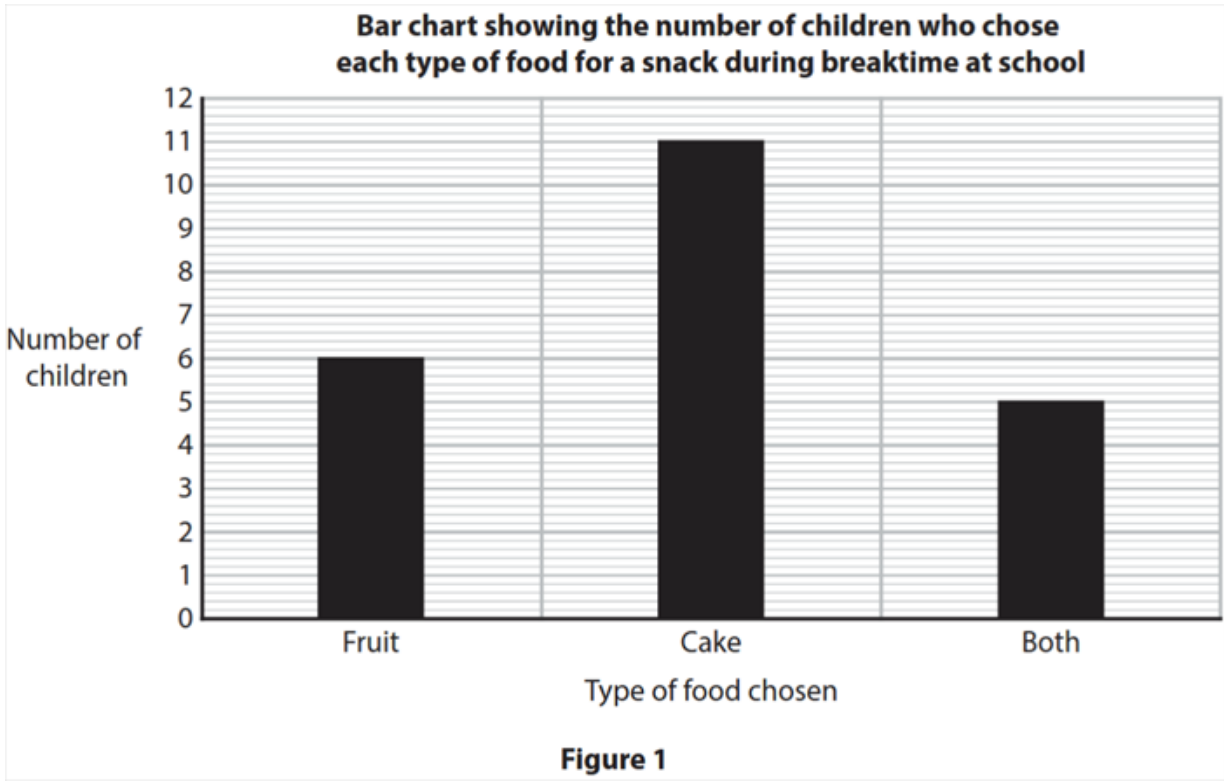
Beverley is a school nurse investigating healthy eating habits in children. She counts how many children choose to eat fruit, cake or both for a snack during breaktime at a school.

(a) Identify the level of measurement for Beverley's data.

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The results of Beverley's investigation are shown in **Figure 1**.



(b) Identify the modal (mode) food type chosen by the children from **Figure 1**.

Modal food type.....

(c) Calculate the ratio of children who chose only fruit to those who chose only cake.

You **must** give your answer in the lowest form.

Space for calculations

Ratio

(d) Calculate the percentage of children who chose only fruit as their snack out of all the children in Beverley's investigation.

You **must** give your answer to **two** decimal places.

Space for calculations

Percentage

(Total for question = 4 marks)

Mark Scheme

Q1.

Question Number	Answer	Mark
(a)	A02 (2 marks) Credit one mark for each accurate statement in relation to the scenario. For example; • Haruto chose to gather qualitative data as he is looking at the social behaviours of the children and community in depth to find out how they play and communicate (1). • He used qualitative data to give him a detailed description of their life within the remote community and how the social systems of the community interact (1). Generic answers score 0 marks. Look for other reasonable marking points.	(2)

Question Number	Answer	Mark
(b)	A02 (2 marks) Credit up to two marks for an accurate description in relation to the scenario. For example; • Haruto could decide on a time when he knows children will be normally playing and communicating with adults, such as at a community gathering (1) and write down details about what he observes taking place at that time between the adults and children including any skills the children learn (1). Generic answers score 0 marks. Look for other reasonable marking points.	(2)

Question Number	Answer	Mark
(c)	A02 (1 mark), A03 (1 mark) Credit one mark for an accurate improvement in relation to the scenario (A02) Credit one mark for exemplification/justification of the improvement (A03) For example; • Haruto could take video recordings of the children and adult communication, their play and the new skills being learned by the children during his time at the remote community (1) which could be checked by other researchers who can make independent observational notes to retest the data gathered by Haruto to increase reliability (1). Generic answers score 0 marks. Look for other reasonable marking points.	(2)

Q2.

Question Number	Answer	Mark																																																
(a)	AO2 (4 marks) Credit one mark for a correct calculation of total for $d^2 = 50$ Credit one mark for a correct calculation of 6 times the sum of $d^2 = 300$ Credit one mark for a correct calculation of 6 times the sum of d^2 divided by $n(n^2-1) = 1.4286$ Credit one mark for a correct answer to three decimal places = -0.429 <table><tr><th>Score for bullying behaviour (out of 20)</th><th>Rank 1</th><th>Score for self-esteem (out of 20)</th><th>Rank 2</th><th>d</th><th>d^2</th></tr><tr><td>18</td><td>5</td><td>4</td><td>1</td><td>4</td><td>16</td></tr><tr><td>9</td><td>2</td><td>13</td><td>4</td><td>-2</td><td>4</td></tr><tr><td>14</td><td>3</td><td>9</td><td>3</td><td>0</td><td>0</td></tr><tr><td>2</td><td>1</td><td>18</td><td>6</td><td>-5</td><td>25</td></tr><tr><td>19</td><td>6</td><td>17</td><td>5</td><td>1</td><td>1</td></tr><tr><td>17</td><td>4</td><td>8</td><td>2</td><td>2</td><td>4</td></tr><tr><td colspan="5">Total for d^2</td><td>50</td></tr></table> • $1 - \frac{6 \times 50}{6(36-1)} = \frac{300}{210} = -0.429$ Look for other reasonable marking points.	Score for bullying behaviour (out of 20)	Rank 1	Score for self-esteem (out of 20)	Rank 2	d	d^2	18	5	4	1	4	16	9	2	13	4	-2	4	14	3	9	3	0	0	2	1	18	6	-5	25	19	6	17	5	1	1	17	4	8	2	2	4	Total for d^2					50	(4)
Score for bullying behaviour (out of 20)	Rank 1	Score for self-esteem (out of 20)	Rank 2	d	d^2																																													
18	5	4	1	4	16																																													
9	2	13	4	-2	4																																													
14	3	9	3	0	0																																													
2	1	18	6	-5	25																																													
19	6	17	5	1	1																																													
17	4	8	2	2	4																																													
Total for d^2					50																																													

Question Number	Answer	Mark
(b)	AO2 (1 mark) Credit one mark for an accurate statement For example; The result is not significant at $P \leq 0.05$ for a two-tailed test where $N=6$ as the calculated value of 0.429 is less than the critical value of 0.886 (1). Look for other reasonable marking points.	(1)

Question Number	Answer	Mark
(c)	A03 (1 mark) Credit one mark for an accurate conclusion For example; Troy could conclude that an individual's self-esteem does not have any relationship to whether the individual displays bullying behaviour or not (1). Look for other reasonable marking points.	(1)

Q3.

Question Number	Answer	Mark
(a)	A02 (1 mark) Credit one mark for an accurate statement. For example; The number of words correctly recalled from a list of 20 words (1). Generic answers score 0 marks. Look for other reasonable marking points.	(1)

Question Number	Answer	Mark																																													
(b)	AO2 (4 marks) PLEASE CLIP WITH (c) Credit one mark for correct completion of difference Credit one mark for correct completion of ranked difference Credit one mark for a correct calculation of sum of both ranks Credit one mark for a correct answer for T= 12.5 <table><tr><th>Participant</th><th>Condition A Words about living things</th><th>Condition B Words about non- living things</th><th>Difference</th><th>Ranked Difference</th></tr><tr><td>A</td><td>11</td><td>15</td><td>-4</td><td>6.5</td></tr><tr><td>B</td><td>14</td><td>12</td><td>2</td><td>3</td></tr><tr><td>C</td><td>9</td><td>11</td><td>-2</td><td>3</td></tr><tr><td>D</td><td>12</td><td>14</td><td>-2</td><td>3</td></tr><tr><td>E</td><td>14</td><td>13</td><td>1</td><td>1</td></tr><tr><td>F</td><td>16</td><td>16</td><td>0</td><td>-</td></tr><tr><td>G</td><td>13</td><td>9</td><td>4</td><td>6.5</td></tr><tr><td>H</td><td>17</td><td>14</td><td>3</td><td>5</td></tr></table> Sum of positive ranks = 15.5 Sum of negative ranks = 12.5 Look for other reasonable marking points.	Participant	Condition A Words about living things	Condition B Words about non- living things	Difference	Ranked Difference	A	11	15	-4	6.5	B	14	12	2	3	C	9	11	-2	3	D	12	14	-2	3	E	14	13	1	1	F	16	16	0	-	G	13	9	4	6.5	H	17	14	3	5	(4)
Participant	Condition A Words about living things	Condition B Words about non- living things	Difference	Ranked Difference																																											
A	11	15	-4	6.5																																											
B	14	12	2	3																																											
C	9	11	-2	3																																											
D	12	14	-2	3																																											
E	14	13	1	1																																											
F	16	16	0	-																																											
G	13	9	4	6.5																																											
H	17	14	3	5																																											

Question Number	Answer	Mark
(c)	AO2 (1 mark) Credit one mark for an accurate statement. PLEASE CLIP WITH (b) For example; The result is not significant at $P \leq 0.05$ for a one-tailed test where $N=7$ as the calculated T value of 12.5 is more than the critical value of 3 (1). Look for other reasonable marking points.	(1)

Question Number	Answer	Mark
(d)	A02 (1 mark) Credit one mark for a correct calculation. • 8 (1). Look for other reasonable marking points.	(1)

Question Number	Answer	Mark
(e)	A03 (1 mark) Credit one mark for an accurate justification. For example; • The use of words of equal length would ensure Iram was accurately testing the influence of the IV of 'living' and 'non-living' and not word length effect (1). Look for other reasonable marking points.	(1)

Q4.

Question Number	Answer	Mark
(a)	A02 (1 mark) Credit one mark for giving an accurate closed question in relation to the scenario (A02) For example; • How many hours per week do you spend playing violent video games? Less than 5; Between 5 and 10; More than 10 (1). Look for other reasonable marking points. Generic answers score 0 marks.	(1)

Question Number	Answer	Mark
(b)	AO2 (1 mark) Credit one mark for accurately identifying the sampling technique from the scenario (AO2) For example; • Opportunity sampling (1). Look for other reasonable marking points.	(1)

Question Number	Answer	Mark																																																												
(c)	AO2 (4 marks) Credit one mark for a correct completion of column d Credit one mark for a correct completion of column d² Credit one mark for a correct substitution into the equation Credit one mark for a correct answer to three decimal places = 0.643 For example; <table><tr><th>Score for aggression out of 20</th><th>Rank 1</th><th>Score for exposure to media violence out of 20</th><th>Rank 2</th><th><i>d</i></th><th><i>d²</i></th></tr><tr><td>9</td><td>4</td><td>10</td><td>4</td><td>0</td><td>0</td></tr><tr><td>15</td><td>7</td><td>13</td><td>6</td><td>1</td><td>1</td></tr><tr><td>14</td><td>6</td><td>18</td><td>8</td><td>-2</td><td>4</td></tr><tr><td>8</td><td>3</td><td>5</td><td>1</td><td>2</td><td>4</td></tr><tr><td>19</td><td>8</td><td>14</td><td>7</td><td>1</td><td>1</td></tr><tr><td>3</td><td>1</td><td>7</td><td>2</td><td>-1</td><td>1</td></tr><tr><td>11</td><td>5</td><td>9</td><td>3</td><td>2</td><td>4</td></tr><tr><td>4</td><td>2</td><td>11</td><td>5</td><td>-3</td><td>9</td></tr><tr><td colspan="5">Total for <i>d²</i></td><td>24</td></tr></table> $1 - \frac{6\sum d^2}{n(n^2-1)} = 1 - \frac{144}{8(64-1)} = 1 - \frac{144}{504} = 1 - 0.286 = \mathbf{0.714}$ Look for other reasonable marking points.	Score for aggression out of 20	Rank 1	Score for exposure to media violence out of 20	Rank 2	<i>d</i>	<i>d²</i>	9	4	10	4	0	0	15	7	13	6	1	1	14	6	18	8	-2	4	8	3	5	1	2	4	19	8	14	7	1	1	3	1	7	2	-1	1	11	5	9	3	2	4	4	2	11	5	-3	9	Total for <i>d²</i>					24	(4)
Score for aggression out of 20	Rank 1	Score for exposure to media violence out of 20	Rank 2	<i>d</i>	<i>d²</i>																																																									
9	4	10	4	0	0																																																									
15	7	13	6	1	1																																																									
14	6	18	8	-2	4																																																									
8	3	5	1	2	4																																																									
19	8	14	7	1	1																																																									
3	1	7	2	-1	1																																																									
11	5	9	3	2	4																																																									
4	2	11	5	-3	9																																																									
Total for <i>d²</i>					24																																																									

Question Number	Answer	Mark
(d)	AO2 (2 marks) Credit up to two marks for an accurate interpretation in relation to the scenario (AO2). For example: 0.714 shows a positive correlation between exposure to media violence and aggression (1) which can be considered as a strong relationship between aggression and media violence as 0.714 is close to 1 (1). Look for other reasonable marking points. Generic answers score 0 marks.	(2)

Question Number	Answer	Mark
(e)	AO2 (1 mark), AO3 (1 mark) Credit one mark for accurate identification of a weakness in relation to the scenario (AO2). Credit one mark for justification/exemplification of the weakness (AO3) For example; Daisy's correlational research only looks at co-variables and cannot establish cause and effect between exposure to media violence and aggression (1). The data only indicates a relationship, not whether one leads to the other, so Daisy cannot draw conclusions about the impact of media violence on someone's levels of aggression (1). Look for other reasonable marking points. Generic answers score 0 marks.	(2)

Q5.

Question Number	Answer	Mark
(a)	AO2 (4 marks) Credit up to four marks for an accurate description in relation to the scenario. For example: Wayne could position himself in an area of the street where he cannot be seen by the people who are walking down the street, but he can see the elderly lady (1). The elderly lady could be given a signal to drop her shopping each time Wayne is ready to observe the responses of the people on the street (1). He could use a tally chart to record the gender of each person who helps the elderly lady pick up her shopping and the people who walk past her (1). He could make notes on other characteristics of the helper, such as their age, whether they were alone or with others, or what they did after they had helped pick up the shopping (1). Look for other reasonable marking points. Generic answers score 0 marks.	(4)

Question Number	Answer	Mark
(b)	AO2 (1 mark), AO3 (1 mark) Credit one mark for accurate identification of a strength in relation to the scenario (AO2). Credit one mark for justification/exemplification of the strength (AO3) For example: The behaviour observed would be natural as the males and females on the busy street would be in their day-to-day environments (1) which increases the validity of his findings about pro-social helping behaviours as his results would represent male and female behaviour in real life contexts (1). Look for other reasonable marking points. Generic answers score 0 marks.	(2)

Q6.

Question Number	Answer	Mark
(a)	AO2 (1 mark) Credit one mark for accurate identification in relation to the scenario Sandeep's primary data will be her questionnaire to gather first-hand data from the teenage boys (1). Generic answers score 0 marks. Look for other reasonable marking points.	(1)

Question Number	Answer	Mark
(b)	AO2 (4 marks) Credit up to four marks for an accurate description in relation to the scenario For example; Sandeep would design a questionnaire that asks for the respondents age and contains closed questions to gather her quantitative data about role models, such as yes/no answers (1). She could also ask questions that gather numerical responses where the boys give the number of male and female role models they have (1). Sandeep would also include open questions to gather detailed explanations from the boys about why they consider certain people to be their role models (1), such as asking them to describe their two most important role models and why they are important (1). Generic answers score 0 marks. Look for other reasonable marking points.	(4)

Question Number	Answer	Mark
(c)	AO2 (1 mark), AO3 (1 mark) Credit one mark for an accurate identification in relation to the scenario (AO2) Credit one mark for justification/exemplification of the prediction (AO3) For example; Sandeep is likely to find that the teenage boys aged between 13 years old and 19 years old have more male role models than they do female role models (1), because social learning theory suggests that when identifying with a role model there is usually the similar characteristic of the model and observer, such as being of the same gender (1). Generic answers score 0 marks. Look for other reasonable marking points.	(2)

Q7.

Question Number	Answer	Mark																																													
(a)	AO2 (2 marks) Credit one mark for a correct calculation of sum of both ranks Credit one mark for a correct answer for T= 9.5 <table><tr><th>Participant</th><th>Month one</th><th>Month two</th><th>Difference</th><th>Ranked Difference</th></tr><tr><td>A</td><td>24</td><td>19</td><td>5</td><td>7</td></tr><tr><td>B</td><td>21</td><td>18</td><td>3</td><td>5.5</td></tr><tr><td>C</td><td>18</td><td>16</td><td>2</td><td>4</td></tr><tr><td>D</td><td>20</td><td>14</td><td>6</td><td>8</td></tr><tr><td>E</td><td>15</td><td>16</td><td>-1</td><td>2</td></tr><tr><td>F</td><td>17</td><td>16</td><td>1</td><td>2</td></tr><tr><td>G</td><td>11</td><td>12</td><td>-1</td><td>2</td></tr><tr><td>H</td><td>14</td><td>17</td><td>-3</td><td>5.5</td></tr></table> Sum of negative ranks = 9.5 Sum of positive ranks = 26.5 Look for other reasonable marking points.	Participant	Month one	Month two	Difference	Ranked Difference	A	24	19	5	7	B	21	18	3	5.5	C	18	16	2	4	D	20	14	6	8	E	15	16	-1	2	F	17	16	1	2	G	11	12	-1	2	H	14	17	-3	5.5	(2)
Participant	Month one	Month two	Difference	Ranked Difference																																											
A	24	19	5	7																																											
B	21	18	3	5.5																																											
C	18	16	2	4																																											
D	20	14	6	8																																											
E	15	16	-1	2																																											
F	17	16	1	2																																											
G	11	12	-1	2																																											
H	14	17	-3	5.5																																											

Question Number	Answer	Mark
(b)	A03 (1 mark) Credit one mark for correctly using data to determine significance. For example: The calculated T value of 9.5 exceeds the critical value of 1 so the difference is not significant (1). Look for other reasonable marking points.	(1)

Question Number	Answer	Mark
(c)	A02 (1 mark), A03 (1 mark) Credit one mark for accurate use of the results (A02) Credit one mark for an accurate conclusion (A03) For example; There is no significant difference between recorded anxiety attacks in month one and those recorded in month two (1), so aromatherapy is not an effective treatment for reducing levels of anxiety (1). Generic answers score 0 marks. Look for other reasonable marking points.	(2)

Q8.

Question Number	Answer	Mark
(a)	A02 (2 marks) Credit up to two marks for an accurate description in relation to the scenario. For example; Bonique would be required to ensure that all the children were given the opportunity to make their own decisions about taking part in the study about shaping their behaviour (1), so she would need to seek the children's views about whether they wish to be involved in her research about reinforcement and punishment and respect their choice (1). Generic answers score 0 marks. Look for other reasonable marking points.	(2)

Question Number	Answer	Mark
(b)	A02 (2 marks), A03 (2 marks) Credit one mark for accurate identification of each ethical requirement in relation to the scenario (A02) Credit one mark for justification/exemplification of each requirement (A03) For example; • Bonique would need to consider any possible harm or distress that may result from any features of operant conditioning she uses in her research (1), as she is required to consider how to eliminate potential risks to psychological well-being, physical health, personal values, and dignity of the children (1). • Bonique would need to ask the children's parents if there are any physical or emotional needs that she needs to be aware of that could mean the children were more at risk (1), as she is responsible for ensuring that any additional individual risk factors have been considered as part of deciding whether the children take part in her research or not (1). Generic answers score 0 marks. Look for other reasonable marking points.	(4)

Q9.

Question Number	Answer	Mark
(a)	A02 (1 mark) Credit one mark for accurately giving one reason in relation to the scenario. For example; • Anonymity may encourage parents or teachers to be honest when answering questions about positive reinforcement (1). Look for other reasonable marking points. Generic answers score 0 marks.	(1)

Question Number	Answer	Mark
(b)	A02 (2 marks) Credit up to two marks for accurately describing one reason in relation to the scenario. For example; Lexy may have chosen these groups as they are the most likely to be involved with children engaging in homework (1). Teachers could provide data about rewards or homework completion, and parents can answer whether their children complete the work at home (1). Look for other reasonable marking points. Generic answers score 0 marks.	(2)

Question Number	Answer	Mark
(c)	A02 (2 marks) Credit one mark for each accurate closed-ended question given. For example; - When a child completes their homework, do you give them verbal praise? Yes / Sometimes / No - How often do you give reward stickers to children who complete homework? Every time / Sometimes / Never Look for other reasonable marking points. Generic answers score 0 marks.	(2)

Question Number	Answer	Mark																																																												
(d)	AO2 (4 marks) Credit one mark for a correct completion of column d Credit one mark for a correct completion of column d² Credit one mark for a correct substitution into the equation Credit one mark for a correct answer to three decimal places = 0.292 For example; <table><tr><th>Number of times positive reinforcement is given in a day</th><th>Rank 1</th><th>Number of hours spent on homework in a day</th><th>Rank 2</th><th><i>d</i></th><th><i>d²</i></th></tr><tr><td>8</td><td>2</td><td>1</td><td>2</td><td>0</td><td>0</td></tr><tr><td>9</td><td>3.5</td><td>1</td><td>2</td><td>1.5</td><td>2.25</td></tr><tr><td>4</td><td>1</td><td>2</td><td>5</td><td>-4</td><td>16</td></tr><tr><td>12</td><td>6</td><td>1</td><td>2</td><td>4</td><td>16</td></tr><tr><td>16</td><td>7</td><td>3</td><td>7.5</td><td>-0.5</td><td>0.25</td></tr><tr><td>11</td><td>5</td><td>2</td><td>5</td><td>0</td><td>0</td></tr><tr><td>9</td><td>3.5</td><td>3</td><td>7.5</td><td>-4</td><td>16</td></tr><tr><td>17</td><td>8</td><td>2</td><td>5</td><td>3</td><td>9</td></tr><tr><td colspan="5">Total for <i>d²</i></td><td>59.5</td></tr></table> $1 - \frac{6\sum d^2}{n(n^2-1)} = 1 - \frac{357}{8(64-1)} = 1 - \frac{357}{504} = 1 - 0.708 = \mathbf{0.292}$ Look for other reasonable marking points.	Number of times positive reinforcement is given in a day	Rank 1	Number of hours spent on homework in a day	Rank 2	<i>d</i>	<i>d²</i>	8	2	1	2	0	0	9	3.5	1	2	1.5	2.25	4	1	2	5	-4	16	12	6	1	2	4	16	16	7	3	7.5	-0.5	0.25	11	5	2	5	0	0	9	3.5	3	7.5	-4	16	17	8	2	5	3	9	Total for <i>d²</i>					59.5	(4)
Number of times positive reinforcement is given in a day	Rank 1	Number of hours spent on homework in a day	Rank 2	<i>d</i>	<i>d²</i>																																																									
8	2	1	2	0	0																																																									
9	3.5	1	2	1.5	2.25																																																									
4	1	2	5	-4	16																																																									
12	6	1	2	4	16																																																									
16	7	3	7.5	-0.5	0.25																																																									
11	5	2	5	0	0																																																									
9	3.5	3	7.5	-4	16																																																									
17	8	2	5	3	9																																																									
Total for <i>d²</i>					59.5																																																									

Question Number	Answer	Mark
(e)	AO2 (1 mark) Credit one mark for an accurate determination in relation to the scenario (AO2). For example: The calculated value of 0.292 is less than the critical value of 0.738, so the data is not significant (1). Look for other reasonable marking points. Generic answers score 0 marks.	(1)

Question Number	Indicative Content	Mark
	AO1 (8 marks), AO3 (12 marks) AO1 - Research with people has to meet the BPS Code of Ethics and Conduct (2009) so people are safe and protected from mistreatment. - Human participants should not be caused distress or harm in research where there could be an alternative, such as case studies or secondary data gathering methods. - Human participants have the right to withdraw themselves or their data from research that they are involved in and have their personal details kept confidential. - HM would not have fully understood his role in research due to his memory failure so did not give informed consent. - Milgram (1963) caused distress to participants by prompting them to continue with the electrocution task. - The UNCRC Article 36 protects children from exploitation, which includes the exploitation of children for medical research which would include psychology. - Animal research is governed by the Animals (Scientific Procedures) Act 1986 so it should be conducted with consideration for the animals welfare. - Animal researchers now require licences to make sure that the animals are given good conditions to live in, they do not suffer and are well looked after.	(20)

	AO3 - Asch (1951) could be considered unethical as deception was used to ensure participants did not guess the aim of the study, however, at times this is necessary to obtain reliable and valid evidence. - Money's (1965) case study highlights the serious implications of unethical research, where the Reimer twins were used for the benefit of the psychologist's research, which was probably not in the interest of the two children. - Bowlby (1944) studied maternal deprivation in juveniles without creating any artificial conditions to cause the deprivation himself, so even sensitive research can ethically take place without causing harm and our understanding can be developed. - Watson and Rayner (1920) created a situation whereby Little Albert developed a fear response to a rat, which was highly unethical as the outcome does not outweigh the poor ethical considerations given there are alternative ways to test this theory. - The case study of Clive Wearing is widely published and as a result his true identity is known to broader society, so ethically fails to protect a vulnerable man with severe memory loss from people not directly involved in the research knowing his personal details. - HM was studied over his entire lifetime without ever really providing fully informed consent due to his short-term memory duration, however the outcomes have given society a better understanding of the functions of human memory. - Breaching guidance about harm was necessary by Milgram (1963) as without this he would not have been able to explain obedience to authority, so the distress was outweighed by the benefit to society. - Ainsworth (1971) used the strange situation procedure to observe an infant with caregivers and strangers, infants often showed distress when the mother left which could be considered exploitative and unethical. - Pavlov studied salivation in dogs to theorise that people and animals could be conditioned to behave in certain ways, this study caused distress to the dogs, but can be considered ethical as animals are a suitable alternative when humans cannot be used. - Harlow (1958) produced unnecessary long-term effects to the emotional development of the monkeys which may have been seen as unethical due to the potential harm caused for future generations. - Rats have been used to study symptoms and treatments of schizophrenia by causing brain lesioning or dopamine imbalances intentionally, this has led to successful drug treatments, so the benefit to human society outweighed the cost to animals. - Skinner studied pigeons and attempted to train them to guide missiles during WWII, this is unethical as the animals would have been sent to their deaths, however during the time of war it was considered acceptable to attempt to use animals in this way. Look for other reasonable marking points.	
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Level	Mark	Descriptor
AO1 (8 marks), AO3 (12 marks) Candidates must demonstrate a greater emphasis on assessment/conclusion vs knowledge and understanding in their answer. Knowledge & understanding is capped at maximum 8 marks.		
	0	No rewardable material.
Level 1	1–4 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) Generic assertions may be presented. Limited attempt to address the question. (AO3)
Level 2	5–8 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 generic or superficial assessment being presented. (AO3)
Level 3	9–12 Marks	Demonstrates accurate knowledge and understanding. (AO1) 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 will be imbalanced. (AO3)
Level 4	13–16 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a logical assessment, containing logical chains of reasoning throughout which consider a range of factors. Demonstrates an understanding of competing arguments/factors but does not fully consider the significance of each which in turn leads to an imbalanced judgement being presented. (AO3)
Level 5	17–20 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical assessment, containing logical chains of reasoning throughout. Demonstrates a full understanding and awareness of the significance of competing arguments/factors leading to a balanced judgement being presented. (AO3)

Q11.

Question Number	Indicative Content	Mark
	AO1 (8 marks), AO3 (12 marks) AO1 • Some early psychology research did cause unnecessary distress to people/animals as the guidance was not enforced in the same way as it is now. • Animal research in the UK is governed by the Scientific Procedures Act (1986) so it should be conducted with consideration for the animals. • Animal researchers require licences to make sure they are given good conditions to live in so they do not suffer and are well looked after. • Research with people in the UK has to meet the BPS Code of Ethics and Conduct (2009) so people are safe and protected from mistreatment. • Respect must be shown to human participants during research so their needs should always be met before the aims of the study. • Human participants should not be caused distress or harm in research where there could be an alternative, such as case studies or secondary data gathering methods. • Human participants have the right to withdraw themselves or their data from research that they are involved in. • The case of HM can be considered unethical as he would never have fully understood his role in research due to his memory failure so did not give informed consent. • Milgram (1963) caused distress to participants by prompting them to continue with the electrocution task.	(20)

	AO3 • Developments in ethical practices mean that studies like Watson and Rayner (1920) can never be repeated, although the outcomes of these have built psychological understanding, there is now no need to replicate unethical research. • Harlow (1958) was criticised for cruelty to monkeys in his research into attachment, this was unnecessary but did generate a public awareness of animal cruelty in society, so raised awareness. • Rats have been used to study symptoms and treatments of schizophrenia by causing brain lesioning or dopamine imbalances intentionally, this has led to successful drug treatments for people with schizophrenia, so the benefit to human society has outweighed the way the animals have been treated. • Singer (1975) claims that it is wrong to do to animals things that we would not do to humans, such as intentional brain lesioning, he calls this speciesism and considers it to be a type of discrimination, just like racism or sexism, so ethics should be more stringent for animal experimentation. • Skinner studied pigeons and attempted to train them to carry missiles during WWII, this is unethical as the animals would have been sent to their deaths, however during the time of war it was considered acceptable to attempt to use animals in this way. • Bowlby (1944) studied maternal deprivation using a case study of juveniles, this was ethical as he did not create any artificial condition to cause deprivation, therefore research can take place without the need to cause any harm to participants, so outcomes can be achieved alongside ethical considerations. • During Zimbardo et al.'s (1973) prison experiment, 'prison guards' began to subject their 'prisoners' to various degrees of psychological torture to such an extreme that the experiment had to be stopped after just six days, so some psychological research has caused significant harm and distress that do not meet ethical considerations. • Bandura (1961) exposed primary-age children to an adult violently abusing a Bobo both physically and verbally and then observed whether the children repeated this behaviour, unethically teaching violence and aggressive behaviours to vulnerable participants. • Even though HM was studied over his entire lifetime without ever providing fully informed consent, the outcomes have given society a better understanding of the functions of human memory. • Breaching guidance about harm was necessary by Milgram (1963) as without this he would not have been able to explain obedience to authority, so the distress was outweighed by the benefit to society. Look for other reasonable marking points.	
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Level	Mark	Descriptor
A01 (8 marks), A03 (12 marks) Candidates must demonstrate a greater emphasis on assessment/conclusion vs knowledge and understanding in their answer. Knowledge & understanding is capped at maximum 8 marks.		
	0	No rewardable material.
Level 1	1–4 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) Generic assertions may be presented. Limited attempt to address the question. (AO3)
Level 2	5–8 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 generic or superficial assessment being presented. (AO3)
Level 3	9–12 Marks	Demonstrates accurate knowledge and understanding. (AO1) 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 will be imbalanced. (AO3)
Level 4	13–16 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a logical assessment, containing logical chains of reasoning throughout which consider a range of factors. Demonstrates an understanding of competing arguments/factors but does not fully consider the significance of each which in turn leads to an imbalanced judgement being presented. (AO3)
Level 5	17–20 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical assessment, containing logical chains of reasoning throughout. Demonstrates a full understanding and awareness of the significance of competing arguments/factors leading to a balanced judgement being presented. (AO3)

Q12.

Question Number	Indicative Content	Mark
	AO1 (8 marks), AO3 (12 marks) AO1 • Social control can be a conscious decision by those in power or with status to elicit behaviours that they believe to be desirable. • Social control is about regulating other people's behaviour, so they comply to the social norms/values/beliefs/rules of social groups. • Understanding factors affecting obedience can lead to genocide as those in power understand how to get others to commit atrocities. • Determining what behaviour is acceptable in society often requires power and can remove individual decision making from people less powerful. • Holism in psychology would suggest that there are a number of factors that result in an individual's behaviour including nature/nurture of which not every factor can be controlled. • Some biological explanations see behaviour as pre-determined, which categorises individuals as inherently different and possibly in need of control. • Psychology has contributed to treatments for mental health such as CBT which has helped individuals gain more control. • Understanding the media role in aggressive behaviour enables positive control in media such as the watershed where guidance states what cannot be shown before 9pm.	(20)

	AO3 • Skinner claimed that operant conditioning increases desirable behaviours and decreases undesirable behaviour, which could be said to have been used in a negative way by supermarkets to encourage customers to buy things they may not need. • Moscovici (1969) enabled society to understand that a minority could influence a majority, so those in power may not have an ability to exert full social control over individuals where there is dissent from a consistent few. • Milgram (1963) explains how authority figures can imply they are responsible for any consequences leading to individuals being more likely to do things they would not normally do if they were in control of the outcomes of their behaviour. • Saachi et al. (2007) found that by circulating doctored material people could be deceived which also affected their future opinions, this helps prevent social control through informing laws on publishing materials. • Bowlby (1944) suggested that maternal deprivation could result in affectionless psychopathy, thus potentially legitimising social control over promoting the role of mothers in the home and domesticity over equality and employment. • Mental health disorders in the past such as moral insanity could be considered a way to control women through diagnosis of abnormality if they had a mind of their own. • Rosenhan (1973) found that a diagnosis of schizophrenia led to pseudo-patients being labelled and being controlled in psychiatric institutions, such as being given medication even when they said they were sane. • Understanding neurotransmitters helps reduce misunderstandings of mental health so patients can lead independent lives instead of being locked away or mistreated, so this gives control to the person not clinician. • Smith (2012) discussed inappropriate drug prescribing, where writing a prescription and using drug treatment is often a first choice but might not be the best choice, exercising social control through 'chemical straightjackets'. • Therapies such as systematic desensitisation empower the client to choose their own stages in the fear hierarchy and the speed at which they progress through that hierarchy, the clients have power in the situation so not all psychology results in social control. • Bastian et al. (2011) highlight how violent video games reduce humanity in individuals which helps ensure safe controls over video game content and age restrictions as a benefit to social development. • Social learning theory suggests that positive role models in sport, for example helping a competitor, could motivate others to behave in similar positive ways, as such is using knowledge for positive outcomes not control. Look for other reasonable marking points.	
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Level	Mark	Descriptor
A01 (8 marks), A03 (12 marks) Candidates must demonstrate a greater emphasis on assessment/conclusion vs knowledge and understanding in their answer. Knowledge & understanding is capped at maximum 8 marks.		
	0	No rewardable material.
Level 1	1–4 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) Generic assertions may be presented. Limited attempt to address the question. (AO3)
Level 2	5–8 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 generic or superficial assessment being presented. (AO3)
Level 3	9–12 Marks	Demonstrates accurate knowledge and understanding. (AO1) 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 will be imbalanced. (AO3)
Level 4	13–16 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a logical assessment, containing logical chains of reasoning throughout which consider a range of factors. Demonstrates an understanding of competing arguments/factors but does not fully consider the significance of each which in turn leads to an imbalanced judgement being presented. (AO3)
Level 5	17–20 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical assessment, containing logical chains of reasoning throughout. Demonstrates a full understanding and awareness of the significance of competing arguments/factors leading to a balanced judgement being presented. (AO3)

Q13.

Question Number	Indicative Content	Mark
	AO1 (8 marks), AO3 (12 marks) AO1 • Milgram's (1963) research into obedience has increased our understanding of the situations in which blind, destructive obedience is most likely to happen. • The working memory model provides an understanding of processing speeds and phonological development in active short-term memory functioning. • Bartlett's (1932) theory of reconstructive memory helps to understand why memory can be inaccurate and recall of events may be different to the exact experience. • The role of brain functioning and structures in aggression, such as the pre-frontal cortex or amygdala, provides knowledge of the innate factors involved in aggression. • Social learning theory emphasises the importance of the role model in the learning of behaviour through attention, retention, reproduction, and motivation. • Explanations of behaviours as a result of hormones have been able to explain how human behaviour can be due to imbalanced melatonin or testosterone. • Bowlby's (1944) research of 44 juvenile thieves suggested that the lack of a maternal attachment figure could result in children developing affectionless psychopathy. • Classical conditioning claims that behaviours such as phobic responses are the product of stimulus-response pairing and association.	(20)

	AO3 • Knowing the factors that impact on obedience can help society with prevention strategies to reduce atrocities such as the Mai Lai massacre from happening again. • Understanding of the optimum conditions for obedience to an authority figure could be used negatively in society by individuals seeking to influence others and gain power and control over those in subordinate positions to them. • Using knowledge of working memory can help children with dyslexia access learning through classroom strategies and direct interventions such as Cog-Med that improve working memory functioning and the accessibility of educational content. • Memory has been found to be largely accurate in eyewitness testimony by Yuille and Cutshall (1986) so considering eyewitness accounts as inaccurate in court trials could be detrimental to achieving justice for defendant or victims of criminal activities. • Raine et al. (1997) found that murderers pleading not guilty by reason of insanity had less activity in their prefrontal brain regions and corpus callosum, helping criminal justice systems understand that violence may not always be a rational choice. • Despite awareness in society of negative influences of thin women in the media on eating disordered behaviour, such as Becker et al. (2002) society does not always use this information to reduce negative influencers, so thin role models remain available. • Bandura's research in his Bobo Doll studies has been utilised in society to reduce access to violent or aggressive media sources by children, such as the PEGI game ratings on video games and the age ratings for movies. • Aggression has been linked to testosterone which has led to chemical treatments for violent male offenders, however this does not explain violence in females and can only be partially used in society to treat offenders. • Treatments such as light therapy have proved to be effective use of our knowledge of the interactions between hormones and external zeitgebers to help treat patients with seasonal affective disorder and irregular sleep patterns or disorders.	
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	- While effective parenting is an important use of psychological knowledge, the findings of Bowlby (1944) may result in society placing blame on the mothers of children who demonstrate anti-social behaviours, which results in negative attitudes to the mother. - Systematic desensitisation has developed from the understanding of phobia acquisition to provide an effective treatment for patients with phobias, shown by Capafons (1998) in their treatment of a fear of flying. - Aversion therapy for homosexuality has been used to 'cure' people of their sexual attractions, despite homosexuality being removed from the DSM in 1973, so the misuse of therapies can lead to social control over the lifestyles of people.	
Look for other reasonable marking points.		

Level	Mark	Descriptor
AO1 (8 marks), AO3 (12 marks) Candidates must demonstrate a greater emphasis on assessment/conclusion vs knowledge and understanding in their answer. Knowledge & understanding is capped at maximum 8 marks.		
	0	No rewardable material.
Level 1	1-4 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) Generic assertions may be presented. Limited attempt to address the question. (AO3)
Level 2	5-8 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 generic or superficial assessment being presented. (AO3)
Level 3	9-12 Marks	Demonstrates accurate knowledge and understanding. (AO1) 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 will be imbalanced. (AO3)
Level 4	13-16 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a logical assessment, containing logical chains of reasoning throughout which consider a range of factors. Demonstrates an understanding of competing arguments/factors but does not fully consider the significance of each which in turn leads to an imbalanced judgement being presented. (AO3)
Level 5	17-20 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical assessment, containing logical chains of reasoning throughout. Demonstrates a full understanding and awareness of the significance of competing arguments/factors leading to a balanced judgement being presented. (AO3)

Q14.

Question Number	Indicative Content	Mark
	AO1 (8 marks), AO3 (12 marks) AO1 • Science is the empirical study of physical evidence that is observable through the senses. • Science requires an unbiased, value-free analysis of data gathered to maintain objectivity. • Popper claimed scientists should test their theory using falsification where they set out to disprove their hypothesis or predictions. • Some psychological theories are introspective and lack the empirical testing of phenomena which can be observed. • Standardised controls and laboratory experiments allow replication to test for reliability. • Scientific methods, such as laboratory experiments, are usually undertaken within artificial contexts with artificial tasks and measures. • Science reduces human behaviour to smaller components in order to test and study individual features of human behaviour. • Universal laws attempt to give a single explanation for the nature of a particular human behaviour.	

	AO3 • Learning theories aim to empirically observe behavioural responses to stimuli, as in Pavlov's (1927) salivation in dogs he measured salivation using a collection jar for the saliva, demonstrating scientific principles. • Qualitative data, such as natural observations, is less scientific as it is not objective, however it may describe human behaviour in more depth than quantitative data, so psychology may not need to be scientific. • The use of brain scanning techniques, such as Raine et al. (1997) allows for a value-free data collection process, yet the interpretation of the PET scans may be subjective, so psychology is not fully scientific. • Bandura applied falsification to study SLT developing this into Social Cognitive Theory after he found his research did not fully explain how people learn behaviour making his theory more scientific. • Psychoanalysis is introspective meaning concepts cannot be falsified yet it is effective in therapy, so not all psychology aims for scientific status. • Milgram (1963) used standardised procedures in his studies of obedience allowing him and others such as Burger (2009) to replicate them to retest findings, increasing scientific credibility of agency theory. • Bartlett (1932) did not use strict controls in his studies of reconstructive memory reducing the scientific nature of his research, although it could be considered a more valid representation of real-life memory. • Peterson and Peterson (1959) used an artificial test of STM using nonsense trigrams that do not represent a realistic use of memory, so there is difficulty in balancing science against realistic behaviour. • Reductionism, such as the dopamine hypothesis, excludes interactions between individuals and the environment to give scientific explanations which is unrealistic when studying the complexities of human nature. • Nomothetic approaches, such as cognitive and biological psychology, attempt to establish universal laws which, despite being scientifically credible, ignore the uniqueness of human beings. Look for other reasonable marking points.	(20)
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Level	Mark	Descriptor
AO1 (8 marks), AO3 (12 marks) Candidates must demonstrate a greater emphasis on assessment/conclusion vs knowledge and understanding in their answer. Knowledge & understanding is capped at maximum 8 marks.		
	0	No rewardable material.
Level 1	1–4 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) Generic assertions may be presented. Limited attempt to address the question. (AO3)
Level 2	5–8 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 generic or superficial assessment being presented. (AO3)
Level 3	9–12 Marks	Demonstrates accurate knowledge and understanding. (AO1) 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 will be imbalanced. (AO3)
Level 4	13–16 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a logical assessment, containing logical chains of reasoning throughout which consider a range of factors. Demonstrates an understanding of competing arguments/factors but does not fully consider the significance of each which in turn leads to an imbalanced judgement being presented. (AO3)
Level 5	17–20 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical assessment, containing logical chains of reasoning throughout. Demonstrates a full understanding and awareness of the significance of competing arguments/factors leading to a balanced judgement being presented. (AO3)

Q15.

Question Number	Indicative Content	Mark
	AO1 (8 marks), AO3 (12 marks) AO1 - Reductionism means looking at the smaller, isolated parts of human behaviour when studying and measuring it. - Reductionism is associated with quantitative, empirical, and objective testing of the constituent parts of human behaviour to give scientific data. - In research reductionism can involve narrowing down specific concepts to an isolated variable so that it is measurable within a hypothesis. - To test behaviour, it should be measurable, and smaller parts of the whole can be operationalised to help researchers take a scientific approach to studying behaviour. - Reductionism provides explanations of parts of human behaviour ignoring the interactions between these parts. - Classical conditioning reduces human behaviour down to simplistic stimulus-response processes in the environment from which people are conditioned into behaviours. - Biological reductionism is an attempt to reduce behaviour down to a physical level and explain it in terms of neurons, neurotransmitters, hormones, or brain structure. - Holism looks at the whole person instead as it considers the influences of wider social and contextual experiences that impact on human behaviour.	(20)

Question Number	Indicative Content	Mark
	AO3 - Brain scanning techniques looking at specific regions can help understand human behaviour, such as Raine et al.'s (1997) brain scans of murders, which benefits our understanding of aggression. - Successful drug treatments for mental health disorders come from studies of isolated parts of the brain, so reductionist research can still lead to effective treatment. - Qualitative data is often gathered in research that is more holistic, while this gives a deeper understanding of human behaviours, it is more subjective and open to interpretation which limits the scientific nature of holistic explanations. - Reducing behaviour down to quantitative measures can provide objective data for the effects of an independent variable on a dependent variable, so reductionism helps researchers gather credible scientific evidence. - Holistic views such as a psychodynamic approach have given rise to successful therapies that treat a person as a whole, suggesting holism reflects the complexity of behaviour better than reductionism. - Experimental reductionism underpins much of the research in cognitive psychology, where memory is reduced to operationalise isolated variables of recalling numbers or words to enable causal relationships to be reached. - Atkinson and Shiffrin (1968) reduced human memory to an input output process, ignoring experiences and simplifying memory, which helped with scientific testing of the different features of SR, STM and LTM. - Bartlett (1932) viewed memory as a reconstructive process, accounting for a more holistic view of human memory processes as a whole process rather than separate structural memory features, which could be more useful than being reductionist. - Watson and Rayner (1920) only focussed on stimulus-response associations and ignored possible external factors for Little Albert's emotional reaction, which could be considered reductionist. - Pavlov reduced human behaviours, such as phobias, to a stimulus-response pairing, ignoring other experiences which may not be beneficial for developing therapies which could ignore wider factors influencing a phobia. - The XYY chromosome has been associated with aggression which has enabled psychology to isolate a biological component that could impact on the way people behave, but this can create negative issues of labelling for individuals with XYY. - Bowlby (1944) suggested attachment is an innate process, but it relies on complex interactions with carers, so while there is an element of biological reductionism it is beneficial to consider the whole experience of a person. Look for other reasonable marking points.	

Level	Mark	Descriptor
AO1 (8 marks), AO3 (12 marks) Candidates must demonstrate a greater emphasis on assessment/conclusion vs knowledge and understanding in their answer. Knowledge & understanding is capped at maximum 8 marks.		
	0	No rewardable material.
Level 1	1–4 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) Generic assertions may be presented. Limited attempt to address the question. (AO3)
Level 2	5–8 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 generic or superficial assessment being presented. (AO3)
Level 3	9–12 Marks	Demonstrates accurate knowledge and understanding. (AO1) 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 will be imbalanced. (AO3)
Level 4	13–16 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a logical assessment, containing logical chains of reasoning throughout which consider a range of factors. Demonstrates an understanding of competing arguments/factors but does not fully consider the significance of each which in turn leads to an imbalanced judgement being presented. (AO3)
Level 5	17–20 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical assessment, containing logical chains of reasoning throughout. Demonstrates a full understanding and awareness of the significance of competing arguments/factors leading to a balanced judgement being presented. (AO3)

Q16.

Question Number	Answer	Mark
(a)	AO2 (1 mark) Credit one mark for correct answer. 70% (1). Reject all other answers.	(1)

Question Number	Answer	Mark
(b)	A02 (1 mark) Credit one mark for correct answer. 190 grams (1). Reject all other answers.	(1)

Question Number	Answer	Mark
(c)	A02 (3 marks) Credit one mark for appropriate title. Credit one mark for appropriate labelling of axes. Credit one mark for correct plots. For example; A scatter diagram to show the relationship between grams of chocolate eaten (in 7 days) and self rated depressive symptoms score (out of 10) Mean self-rated depressive symptoms score (out of 10) Total grams of chocolate eaten in seven days Look for other reasonable marking points.	(3)

Question Number	Answer	Mark
(d)	A02 (2 marks) Credit up to two marks for an accurate interpretation. - The scatter diagram shows a strong negative correlation with self-rated depressive symptom scores reducing as grams of chocolate eaten increases (2). - The scatter diagram shows a negative correlation between eating chocolate and self-rated depressive symptom scores (1). Generic answers score 0 marks. Look for other reasonable marking points.	(2)

Q17.

Question Number	Answer	Mark																																								
(a)	A02 (4 marks) PLEASE CLIP WITH 7(b and c) Credit one mark for accurate completion of O-E column to two decimal places. Credit one mark for accurate completion of (O-E)² column to two decimal places. Credit one mark for accurate completion of (O-E)²/E column to two decimal places. Credit one mark for correct chi-squared to two decimal places= 1.02 <table><tr><th></th><th></th><th>Observed</th><th>Expected</th><th>O-E</th><th>(O-E)²</th><th>(O-E)²/E</th></tr><tr><td rowspan="2">Males</td><td>Ran to the platform</td><td>41</td><td>38.03</td><td>2.97</td><td>8.82</td><td>0.23</td></tr><tr><td>Did not run to the platform</td><td>21</td><td>23.97</td><td>-2.97</td><td>8.82</td><td>0.37</td></tr><tr><td rowspan="2">Females</td><td>Ran to the platform</td><td>51</td><td>53.97</td><td>-2.97</td><td>8.82</td><td>0.16</td></tr><tr><td>Did not run to the platform</td><td>37</td><td>34.03</td><td>2.97</td><td>8.82</td><td>0.26</td></tr><tr><td colspan="4"></td><td>Chi squared =</td><td colspan="2">1.02</td></tr></table> Look for other reasonable marking points.			Observed	Expected	O-E	(O-E) ²	(O-E) ² /E	Males	Ran to the platform	41	38.03	2.97	8.82	0.23	Did not run to the platform	21	23.97	-2.97	8.82	0.37	Females	Ran to the platform	51	53.97	-2.97	8.82	0.16	Did not run to the platform	37	34.03	2.97	8.82	0.26					Chi squared =	1.02		(4)
		Observed	Expected	O-E	(O-E) ²	(O-E) ² /E																																				
Males	Ran to the platform	41	38.03	2.97	8.82	0.23																																				
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Females	Ran to the platform	51	53.97	-2.97	8.82	0.16																																				
	Did not run to the platform	37	34.03	2.97	8.82	0.26																																				
				Chi squared =	1.02																																					

Question Number	Answer	Mark
(b)	A02 (1 mark) Credit one mark for an accurate statement. PLEASE CLIP WITH 7(a and c) For example; The result is not significant at $P \leq 0.025$ for a two-tailed test where $df=1$ as the calculated value of 1.02 is less than the critical value of 5.02 (1). Look for other reasonable marking points.	(1)

Question Number	Answer	Mark
(c)	AO3 (1 mark) Credit one mark for an accurate conclusion. PLEASE CLIP WITH 7(a and b) For example; Jamie could conclude that there is no difference in the level of obedience shown by males and females when given an instruction (1). Look for other reasonable marking points.	(1)

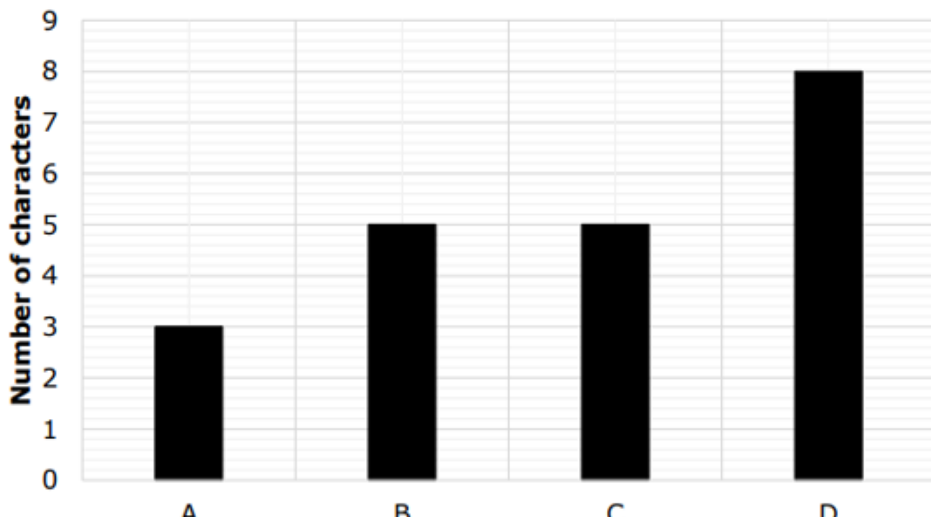
Q18.

Question Number	Answer	Mark
(a)	AO2 (1 mark) Credit one mark for a correct answer For example; 9:5 (1) Look for other reasonable marking points.	(1)

Question Number	Answer	Mark																																								
(b)	AO2 (4 marks) Credit one mark for accurate completion of O-E column to two decimal places Credit one mark for accurate completion of (O-E)² column two decimal places Credit one mark for accurate completion of (O-E)²/E column to two decimal places Credit one mark for correct chi-squared to two decimal places = 2.23 <table><tr><th></th><th></th><th>Observed</th><th>Expected</th><th>O-E</th><th>(O-E)²</th><th>(O-E)²/E</th></tr><tr><td rowspan="2">Played with their peers first</td><td>Girls</td><td>18</td><td>15.43</td><td>2.57</td><td>6.61</td><td>0.43</td></tr><tr><td>Boys</td><td>10</td><td>12.57</td><td>-2.57</td><td>6.61</td><td>0.53</td></tr><tr><td rowspan="2">Played with older children first</td><td>Girls</td><td>9</td><td>11.57</td><td>-2.57</td><td>6.61</td><td>0.57</td></tr><tr><td>Boys</td><td>12</td><td>9.43</td><td>2.57</td><td>6.61</td><td>0.70</td></tr><tr><td colspan="4"></td><td>Chi-squared =</td><td>2.23</td><td></td></tr></table> Look for other reasonable marking points.			Observed	Expected	O-E	(O-E) ²	(O-E) ² /E	Played with their peers first	Girls	18	15.43	2.57	6.61	0.43	Boys	10	12.57	-2.57	6.61	0.53	Played with older children first	Girls	9	11.57	-2.57	6.61	0.57	Boys	12	9.43	2.57	6.61	0.70					Chi-squared =	2.23		(2)
		Observed	Expected	O-E	(O-E) ²	(O-E) ² /E																																				
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	Boys	12	9.43	2.57	6.61	0.70																																				
				Chi-squared =	2.23																																					

Question Number	Answer	Mark
(c)	AO2 (1 mark), AO3 (1 mark) Credit one mark for accurate identification in relation to the scenario (AO2) Credit one mark for justification/exemplification (AO3) For example; Lisa could have explained the aim and procedure of her observation to the parents of the children she intended to observe playing during break time (1) therefore ensuring she meets the requirements of the BPS (2009) by giving parents the opportunity to fully understand the nature and purpose of her research with their children so they may consent to their child taking part (1). Generic answers score 0 marks. Look for other reasonable marking points.	(2)

Question Number	Answer	Mark
(a)	AO2 (1 mark) Credit one mark for a correct calculation. For example; 14:13 (1). Look for other reasonable marking points.	(1)

Question Number	Answer	Mark										
(b)	AO2 (3 marks) Credit one mark for appropriate title. Credit one mark for appropriate labelling of axes. Credit one mark for correct plots. For example; A bar chart to show the number of non-stereotypical female characters shown in four television programmes <table style="margin: 10px auto; border-collapse: collapse;"><caption>Data for Bar Chart</caption><tr><th>Television programme</th><th>Number of characters</th></tr><tr><td>A</td><td>3</td></tr><tr><td>B</td><td>5</td></tr><tr><td>C</td><td>5</td></tr><tr><td>D</td><td>8</td></tr></table> Look for other reasonable marking points.	Television programme	Number of characters	A	3	B	5	C	5	D	8	(3)
Television programme	Number of characters											
A	3											
B	5											
C	5											
D	8											

Q20.

Question Number	Answer	Mark
(a)	AO2 (4 marks) Credit up to four marks for an accurate description in relation to the scenario. For example: Brian would need to ensure that the room used for the memory test was soundproofed to prevent any unplanned noise being heard by participants in the experiment (1). He could present a word list in silence to the 20 participants for 30 seconds which they must recall immediately as a baseline measure (1). The same participants could then be presented with another word list for 30 seconds while instrumental music plays loudly during presentation and recall (1). He could also repeat this using a different noise playing loudly that contains just words, such as a speech. (1). Look for other reasonable marking points. Generic answers score 0 marks.	(4)

Question Number	Answer	Mark
(b)	AO2 (1 mark), AO3 (1 mark) Credit one mark for accurate identification of a strength in relation to the scenario (AO2). Credit one mark for justification/exemplification of the strength (AO3) For example: The primary data gathered by Brian will be of direct relevance to his aim to find out about how noise impacts on short-term memory recall (1) which increases the construct validity of his investigation as his results about the number of words recalled will be an accurate test of noise (1). Look for other reasonable marking points. Generic answers score 0 marks.	(2)

Q21.

Question Number	Answer	Mark
(a)	A02 (2 marks) Credit up to two marks for an accurate description in relation to the scenario. For example; Zhi could advertise her research about educational achievement through the local schools where children aged six would be attending (1) and include her contact details for parents of six-year-olds to volunteer to take part in the longitudinal research on parenting styles and education (1). Generic answers score 0 marks. Look for other reasonable marking points.	(2)

Question Number	Answer	Mark
(b)	A02 (1 mark), A03 (1 mark) Credit one mark for an accurate improvement in relation to the scenario (A02) Credit one mark for exemplification/justification of the improvement (A03) For example; Zhi could also include families who have new-born babies and children under six years old in her investigation (1) which would allow her to find out about the influence of parenting styles from a child's birth onwards so her findings about educational achievement are more valid (1). Generic answers score 0 marks. Look for other reasonable marking points.	(2)

Q22.

Question Number	Answer	Mark
(a)	AO2 (2 marks) Credit up to two marks for an accurate description in relation to the scenario. For example; Ling could read through each of the articles looking at the information given by parents to pick out words and phrases that relate to parenting style and attachment (1) and then identify any similarities in the ideas that are commonly mentioned across all of the articles to produce a summary of links between parenting and attachment (1). Generic answers score 0 marks. Look for other reasonable marking points.	(2)

Question Number	Answer	Mark
(b)	AO2 (1 mark), AO3 (1 mark) Credit one mark for an accurate improvement in relation to the scenario (AO2) Credit one mark for exemplification/justification of the improvement (AO3) For example; Ling could use more than nine articles as her sources, for example gathering 20 articles that have been peer-reviewed and published to increase her sample size (1) which would increase validity by reducing the impact of any anomalies in the results from the articles she uses about the impact of parenting style on infant attachment (1). Generic answers score 0 marks. Look for other reasonable marking points.	(2)

Q23.

Question Number	Indicative Content	Mark
	AO1 (4 marks), AO2 (4 marks) AO1 - The amygdala can be activated in stressful situations, which initiates the fight or flight responses such as fear and anger. - The prefrontal cortex regulates social behaviour and aggressive responses, and damage to the prefrontal cortex reduces the inhibition of the amygdala resulting in higher levels of aggression - The low-activity of the MAOA gene has been found to have a relationship with aggression, becoming known as the warrior gene. - Hormones such as high testosterone and low cortisol can be linked to aggressive behaviour, particularly in males. AO2 - Charles Whitman may not have acted on free will when he killed and wounded people due to the brain tumour affecting his amygdala, meaning legal systems should consider treatment for someone with an inability to control their aggression. - Biological theories like the pre-frontal cortex show that innate aggression may not be a choice and treatments may be better for helping violent offenders. - Although Charles Whitman was found to have a tumour, he still killed 16 people and wounded 31 others, and despite any biological factors the legal system should still punish offenders for aggressive actions such as murder. - Dabbs et al. (1995) found high levels of testosterone in violent criminals, but environmental influences can trigger the release of testosterone and people have free will and choice over whether to expose themselves to such triggers. Look for other reasonable marking points.	(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)

Q24.

Question Number	Indicative Content	Mark
	AO1 (4 marks), AO2 (4 marks) AO1 • Someone with a social dominance orientation is more likely to engage in egocentric behaviours that advance their personal interest. • Organisations that enhance hierarchies may instil ideologies that favour social dominance of one group above others. • Erikson suggested that without the positive feedback at Stage 7 people may experience stagnation and become frustrated that they're unable to succeed at work. • Normative influence is when people are motivated to be accepted by other group members so conform to the normative beliefs of a group. AO2 • Bullying may increase when someone in power felt a sense of incompetence in their role as they may feel they need to re-establish their own position in a workplace hierarchy. • An organisation could change the nature of hierarchical relationships between people in the workplace to encourage more positive experiences between employees and reduce bullying. • As Fast and Chen (2009) claimed, aggressiveness seemed to dissipate when the individual's sense of self-worth was boosted, so positive feedback may help prevent bullying if people feel success at this stage. • Where work environments were considered friendly O'Moore and Lynch (2007) found less bullying so establishing a belief that friendliness is important may encourage others to conform to friendly behaviours and not bully other people in the workplace. Look for other reasonable marking points.	(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)

Q25.

Question Number	Indicative Content	Mark
	A01 (4 marks), A02 (4 marks) A01 • Operant conditioning would suggest that desired consequences will positively reinforce behaviour and that behaviour will be repeated. • Activities that bring pleasure can increase activation of the dopamine reward pathway and stimulate feelings of euphoria. • Family therapy is where a patient, their family and friends attend sessions to work with each other to help support mental health. • Drug treatments such as SSRI mood stabilisers aim to regulate a person's neurotransmitter functioning in the brain. A02 • The variable ratio reinforcement schedule encourages internet addiction by positively reinforcing the addict, this could be likes for an Instagram photograph or points in a game, so interventions could use positive reinforcements that outweigh those on the internet. • When mood enhancing content is found through internet use it could mean the users need for more time to achieve sufficient stimulation of dopamine to reach their desired mood, so interventions would need to reduce internet time gradually to avoid withdrawal. • The results of internet addiction, such as family conflict and a poor social life could be addressed through interventions like family therapy where the concerns about the inability to control internet use can be discussed to support the internet addict to stop. • SSRI's may help reduce the withdrawal symptoms from not using the internet which may be due to the addict needing greater amounts of time online to achieve the same emotional response and mood that they desire from the use of mobile devices or video games. Look for other reasonable marking points.	(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)

Q26.

Question Number	Indicative Content	Mark
	AO1 (4 marks), AO2 (4 marks) AO1 - The central executive is responsible for attention and supervision of the slave systems according to working memory model (Baddeley and Hitch, 1974). - The central executive deals with environmental stimuli and controls delegation of this to visual, spatial, and auditory processing systems. - The medial temporal lobe includes the hippocampus which has been found to be involved in memory functioning. - The case of HM demonstrated that damage to the MTL hippocampal region could result in an inability to form new long-term memories. AO2 - Becker's (1988) research may explain that a dysfunction in central executive delegation processes could explain a loss of concentration by Alzheimer's patients. - Memory impairments associated with poor encoding could be a result of the central executive being unable to process environmental stimuli to the correct sub-system. - The medial-temporal lobe is involved in memory and decreased activation could impair memory causing the Alzheimer's symptoms. - Schwindt and Black (2009) looked at scientific evidence of reduced activity in the MTL which could explain how Alzheimer's onset begins with brain functioning impairments. Look for other reasonable marking points.	(8)

Level	Mark	Descriptor
A01 (4 marks), A02 (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. (A01) Provides little or no reference to relevant evidence from the context (scientific ideas, processes, techniques and procedures). (A02)
Level 2	3–4 Marks	Demonstrates mostly accurate knowledge and understanding. (A01) 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). (A02)
Level 3	5–6 Marks	Demonstrates accurate knowledge and understanding. (A01) 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 (A02)
Level 4	7–8 Marks	Demonstrates accurate and thorough knowledge and understanding. (A01) 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). (A02)

Q27.

Question Number	Indicative Content	Mark
	AO1 (4 marks), AO2 (4 marks) AO1 • Social learning theory suggests we learn our behaviour through observation and imitation of the actions by those who we consider to be role models. • Bartlett (1932) suggests we form schema's from our experiences of the world around use which we use to aid our memory recall of events and situations. • Social power theory would claim that having legitimate power would enable an individual to be able to lead or control others to comply with their norms and requests. • Asch (1951) found that participants would conform to a majority influence even in situations where the true answer was relatively unambiguous, agreement with the majority answer still occurred. AO2 • The media influence from potential role models, such as the media violence and aggressive behaviour, suggest secondary socialisation could influence learning and development. • The messages in media such as propaganda could socialise someone into having negative beliefs about others as this could become part of a persons schema about a group or person. • Adler and Adler (1998) found some members of peer groups had more power and influence than others which could enable them to socialise others into particular values and beliefs. • Conformity to the cultural beliefs, norms, and values of wider society can have a beneficial influence on pro-social behaviour such as educational television programmes. Look for other reasonable marking points.	(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)

Q28.

Question Number	Indicative Content	Mark
	A01 (4 marks), A02 (4 marks) A01 • Animal research is governed by the Scientific Procedures Act (1986), and should be conducted with consideration of refinement, reduction, and replacement in terms of the animals. • Animal researchers require licences to make sure the animals are given good conditions to live in, that they do not suffer and are well looked after. • Bateson's cube is a cost-benefit analysis for animal research to evaluate proposed research through the criteria of the degree of animal suffering, the quality of the research and the potential benefit. • There are ethical reasons for using animals rather than humans as procedures can be carried out on animals that cannot be done on humans. A02 • van den Oever et al. (2008) wanted to develop a drug therapy for treating an addiction to heroin which would be appropriate to undertake if they used a minimal number of rats to experiment with. • Harlow's (1965) study isolated rhesus monkeys by housing them in stainless-steel chambers with no contact, this may not be ethically appropriate as the monkeys suffered for up to 12 months. • Harlow determined the impact of social isolation on development, but the cost-benefit of the findings compared to having a worthwhile impact on wider society may not have given his research ethical appropriateness. • It was appropriate for van den Oever et al. (2008) to create the addiction to heroin in rats as addiction could not be induced in humans, it would be unethical to cause heroin addictions to people. Look for other reasonable marking points.	(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)

Q29.

Question Number	Indicative Content	Mark
	AO1 (4 marks), AO2 (4 marks) AO1 - Capafons et al. (1998) found that systematic desensitisation is also an effective therapy for reducing the fear of flying. - Systematic desensitisation usually requires around 15 sessions where the patient will work through a hierarchy of fears. - Psychoanalysis can be used to discover the root cause of a phobia where patients may have experienced a traumatic event. - Cognitive behavioural therapy addresses behavioural responses and negative thinking when treating patients with anxieties and phobias. AO2 - As Rothbaum et al. (2006) found that some of the participants were still not able to take flights after exposure therapy the airlines could offer systematic desensitisation as an option. - Where the phobia is clinically diagnosed and overwhelms the person, an airline programme of one day or an online course may not help as people may need a longer period of therapeutic treatment. - Airlines could offer treatments to passengers with a non-clinical fear of flying and refer more serious cases to appropriate mental health services who are better equipped to deal with underlying trauma. - If airlines do offer treatment to passengers who have a phobia of flying, they should consider offering multiple interventions, like CBT, as not all individuals will respond to the same treatment programme. Look for other reasonable marking points.	(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
	AO1 (8 marks), AO3 (12 marks) AO1 • Androcentric is when research is centred on, or dominated by, males; or takes only a male viewpoint. • Gynocentric is when research is centred on, or dominated by, females; or takes only a female or feminist viewpoint. • Socialisation from early infancy is underpinned by social norms, values and expectations of behaviour that are gender specific. • Nomothetic laws of universality can ignore the effects of gender on how behaviours may differ between males and females. • Alpha bias refers to theories which exaggerate the differences between males and females. • Beta bias theories have traditionally ignored or minimised sex differences between males and females. • Neurotransmitter explanations of human behaviour are based on physiological components that are unlikely to be affected by gender. • Poor representativeness of gender differences in participant samples could limit research findings.	(20)

	AO3 • Milgram's (1963) research involved all male participants until experiment 8 where it was found that females reported higher levels of stress and tension than male participants, showing there is some difference in gender obedience. • Wong et al. (1997) used MRI scans of 19 violent male criminals and compared the size of the amygdala with 20 'normal' control subjects, but as their research was confined to males the findings may not fully explain violence in females. • Ainsworth et al. (1978) researched attachment in Baltimore, where she focussed on infant-mother interactions as a marker of attachment type, excluding the father of the child from her research, leading to a gynocentric focus of attachment. • Bowlby (1944) theorised that maternal deprivation could lead to juvenile delinquency, ignoring the role of paternal deprivation or male role models in his ideas about bonding and children's emotional development. • Evans and Davies (2000) researched books published in 1997 for children in school, there were fairly equal numbers of males and females represented, but they were gender stereotyped, so people learn to view males and females differently from an early age and researchers may not be aware of unconscious bias in their research. • Becker et al. (2002) has an alpha bias in sampling girls in Fiji to research the impact of television on eating behaviours, demonstrating a gendered assumption that there is a difference in how or whether eating disorders may affect boys in the same way. • Chen et al. (2019) found that low expression of the MAOA gene in women was related to greater happiness, yet no such association was found in men, so there are gender differences between males and females that researchers should consider. • Kohlberg's stage of moral development shows beta bias as it was based on interviews with boys, and conceptualised morality with justice, yet Gilligan (1982) found women tend to be focused on relationships when making moral decisions, so often appear at a lower level of moral reasoning in Kohlberg's stages. • It is likely that dopamine plays a part universally in schizophrenia, but how the disorder is experienced may reflect gender differences in the D2 receptor given there are differences in the onset for men and women. • Rosenthal (1966) found male experimenters were more pleasant, friendly, honest, and encouraging with female participants than with males, therefore male and female participants may experience the research process itself very differently. • Where studies have gender biased samples, such as Moscovici (1969) using just female participants, the results may not be representative of male conformity, limiting the usefulness of the findings. • The APA reported that in the 2014-2015 academic year around 75% of psychology graduates were female, showing a reduction in male psychologists which may result in a shift in the nature of research in psychology from previously male dominated. Look for other reasonable marking points.	
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Level	Mark	Descriptor
AO1 (8 marks), AO3 (12 marks) Candidates must demonstrate a greater emphasis on evaluation/conclusion vs knowledge and understanding in their answer. Knowledge & understanding is capped at maximum 8 marks		
	0	No rewardable material.
Level 1	1–4 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	5–8 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	9–12 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	13–16 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)
Level 5	17–20 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 and presents a balanced response, leading to an effective nuanced and balanced conclusion. (AO3)

Q31.

Question Number	Answer	Mark
	AO1 (2 marks), AO3 (2 marks) Credit one mark for accurate identification of a strength and a weakness (AO1). Credit one mark for justification/exemplification of the strength and the weakness (AO3) For example; Strength • A field experiment allows a researcher to manipulate the independent variable and measure a dependent variable in a natural context for the participants (1) which increases the ecological validity of any cause and effect conclusions that are drawn from the results in psychological research using field experiments (1). Weakness • There are limitations in how well a researcher can prevent extraneous variables in a field experiment context as there is less control than in a laboratory (1) which may result in variables other than the IV confounding the results of the psychological research and generating unreliable data (1). Look for other reasonable marking points.	(4)

Q32.

Question Number	Answer	Mark
	A02 (3 marks), A03 (3 marks) Credit one mark for each accurate point identified in relation to the scenario (A02) Credit one mark for exemplification/justification of each point (A03) For example; • Poppy would need to control for demand characteristics so that her participants did not guess that her aim was to test conformity to a majority group and behave in an unrealistic way (1). This would ensure there is construct validity in her experiment and that her line test answers were a measure of conformity and not skewed by participants changing their behaviour (1). • Control of order effects would be important with 20 trials in each experiment as participants may become bored and their answers could reflect a lack of interest rather than the effect of a majority group (1). Poppy could include distracter trials that differ from the line test so that participants have a break from the monotony of the same line task which would improve the accuracy of the results about conformity (1). • Poppy plans to replicate her experiment three times so will need to control for any extraneous variables that could confound the results gathered about conformity and group influence to ensure each replication was the same (1). This would ensure that each of the three replications of the line test is directly comparable so that Poppy's results have stronger test-retest reliability as they can be checked across her replications (1). Generic answers score 0 marks. Look for other reasonable marking points.	(6)

Q33.

Question Number	Answer	Mark
	A02 (3 marks), A03 (3 marks) Credit one mark for each accurate point identified in relation to the scenario (A02) Credit one mark for exemplification/justification of each point (A03) For example; • Rabia would need to ensure that she only conducted the medical procedure on the smallest number of rats possible whilst enabling her research to be a reliable test of testosterone and aggression (1), this ensures she meets the requirement of 'reduction' in the Animals (Scientific Procedures) Act 1986 that the number of animals is reduced to the minimum needed to achieve the results sought (1). • The medical procedure on the rats should be undertaken in a manner that causes the least pain and harm to the rats during the operation and afterwards during the experiment (1). This is because the Animals (Scientific Procedures) Act 1986 states that all procedures must be refined in order to minimise any suffering that an animal would experience during the experiment (1). • The rats would need to be housed and cared for in appropriate caging and given acceptable standards of care such as feeding the rats during the experimental period of time (1) in order to meet the code of practice for promoting good animal welfare through the provision of consistent, high-quality care and accommodation for the animals is met by Rabia (1). Generic answers score 0 marks. Look for other reasonable marking points.	(6)

Q34.

Question Number	Answer	Mark
(a)	A01 (1 mark), A03 (1 mark) Credit one mark for accurate identification of how to overcome order effects (A01) Credit one mark for justification/exemplification (A03) For example; • A researcher could use counterbalancing by placing two sets of participants into alternating groups of each condition such as AB and BA grouping (1) which prevents participants from becoming tired when completing each of the conditions and reduce the impact of fatigue effects confounding results of the research (1). Look for other reasonable marking points.	(2)

Question Number	Answer	Mark
(b)	AO1 (1 mark), AO3 (1 mark) Credit one mark for accurate identification of how to overcome social desirability (AO1) Credit one mark for justification/exemplification (AO3) For example; A researcher could make the participants aware that their identities will be kept anonymous in their research so they are aware they will not be named (1) which can help limit the likelihood that they would give answers that fit social norms and values to present themselves in a more favourable light (1). Look for other reasonable marking points.	(2)

Q35.

Question Number	Answer	Mark
(a)	AO2 (1 mark), AO3 (1 mark) Credit one mark for accurate identification of a weakness in relation to the scenario (AO2) Credit one mark for justification/exemplification of the weakness (AO3) For example; Samad is recording information about only one patient with severe memory problems which makes his case study of a unique individual unrepresentative of others (1), which would reduce the generalisability of his findings about memory problems as the problems faced by his patient may not reflect the memory functions of a wider target population (1). Generic answers score 0 marks. Look for other reasonable marking points.	(2)

Question Number	Answer	Mark
(b)	AO2 (2 marks), AO3 (2 marks) Credit one mark for accurate identification of each strength in relation to the scenario (AO2) Credit one mark for justification/exemplification of each strength (AO3) For example; - Samad has used multiple research methods within his case study to triangulate his findings about the patient's memory and recall over the five-year period (1). This will help Samad internally validate his findings within the case study as he can compare the data across a range of evidence to draw conclusions about her memory (1). - The use of objective measures such as the fMRI brain scan of the patient gives the case study of his patient's memory processing stronger scientific credibility (1) as Samad can ask other researchers to interpret the fMRI scans to help eliminate subjectivity from his findings (1). Generic answers score 0 marks. Look for other reasonable marking points.	(4)

Q36.

Question Number	Answer	Mark
	A02 (3 marks), A03 (3 marks) Credit one mark for accurate identification of each weakness in relation to the scenario (A02) Credit one mark for exemplification/justification of each weakness (A03) For example; • Rene is only using one unique patient in her case study of long-term memory loss which would not represent the memory of a wider population (1), so her findings about the impact of the sailing accident on memory loss would not be generalisable beyond the patient studied (1). • Visiting the patient every day for three months will be time consuming for Rene and may result in her being unable to visit on some days (1). This could lead to gaps in the data she records about the patients memory, reducing the validity of her findings about memory loss (1). • Rene may be subjective in her interpretation of the outcomes of activities and discussions due to working so closely with the 27 year old patient (1). This reduces the reliability of the findings about long-term memory loss as her researcher bias may influence the way she interprets her findings (1). Generic answers score 0 marks. Look for other reasonable marking points.	(6)

Q37.

Question Number	Answer	Mark
(a)	A02 (1 mark) Credit one mark for an accurate identification. • Nominal data as she is tallying what snacks are eaten at break (1). Look for other reasonable marking points.	(1)

Question Number	Answer	Mark
(b)	A02 (1 mark) Credit one mark for an accurate identification. • Cake (1). Look for other reasonable marking points.	(1)

Question Number	Answer	Mark
(c)	AO2 (1 mark) Credit one mark for a correct calculation. • 6:11 (1). Look for other reasonable marking points.	(1)

Question Number	Answer	Mark
(d)	AO2 (1 mark) Credit one mark for a correct calculation. • 27.27% (1). Look for other reasonable marking points.	(1)