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EDEXCEL A LEVEL PSYCHOLOGY: QUESTIONS BY TOPIC

Learning Theories (Topic 4)

AS and A Level Psychology Topic 4

64 questions · 418 marks · Mark schemes included

Pearson Edexcel AS (8PS0) and A Level (9PS0) Psychology, June 2016 - June 2025

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HOW TO USE THIS BOOKLET

Questions are grouped by sub-topic and run from the lowest mark tariff to the highest.

Click any heading or question row below to jump straight to it.

On every question page, click ANSWER in the top-right corner to jump to its mark scheme.

Diagrams, graphs, tables and data are printed exactly as they appeared in the original papers.

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ANIMAL RESEARCH AND LEARNING

4 questions · 27 marks

48

39. Q12	A Level Paper 1 June 2017	4	49
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METHODS, STUDIES AND PRACTICAL INVESTIGATION

22 questions · 161 marks

55

43. Q13	A Level Paper 1 June 2017	3	56
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46. Q10	A Level Paper 1 June 2023	4	59
47. Q8	AS Paper 2 June 2024	5	60
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50. Q4	AS Paper 2 June 2016	7	64
51. Q11	A Level Paper 1 June 2018	7	65
52. Q13	A Level Paper 1 October 2020	7	67
53. Q9	A Level Paper 1 June 2023	7	68
54. Q14	A Level Paper 1 June 2017	8	70
55. Q13	A Level Paper 1 June 2018	8	71
56. Q7	AS Paper 2 June 2022	8	72
57. Q13	A Level Paper 1 June 2024	8	73
58. Q6	AS Paper 2 June 2017	9	74
59. Q6	AS Paper 2 June 2023	9	75
60. Q4	AS Paper 2 June 2022	10	78
61. Q6	AS Paper 2 June 2025	10	80
62. Q5	AS Paper 2 June 2018	11	81
63. Q9	A Level Paper 1 June 2019	11	84
64. Q8	AS Paper 2 June 2025	12	87



QUESTIONS

64 questions · 418 marks · grouped by sub-topic, lowest tariff first



SUB-TOPIC

CLASSICAL CONDITIONING

12 questions in this booklet



SECTION 2: LEARNING THEORIES

11 Classical conditioning uses many terms to explain the acquisition of behaviour.

Define the terms 'unconditioned response (UCR)' and 'extinction'.

(2)

Unconditioned response (UCR)

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Extinction

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(Total for Question 11 = 2 marks)



12 When Arthur was three years old a chicken chased him and pecked at him. This frightened Arthur and made him cry, resulting in alektorophobia (a fear of chickens).

Identify the conditioned stimulus (CS) and conditioned response (CR) from the scenario.

Conditioned stimulus (CS)

Conditioned response (CR)

(Total for Question 12 = 2 marks)



Learning theories

- 11** As a child, Petunia loved cats. One day, when she was playing in her garden a cat scratched her arm, frightening her. This caused Petunia to develop a phobia of cats.

Identify the unconditioned stimulus (UCS) and the neutral stimulus (NS) for Petunia's phobia.

Unconditioned stimulus (UCS)

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Neutral stimulus (NS)

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(Total for Question 11 = 2 marks)



12 Jodi attended a number of birthday parties when she was younger. At all of the parties there was a clown who burst a balloon which scared Jodi. Jodi is now fearful of clowns.

Using your knowledge of classical conditioning, explain how Jodi developed a fear of clowns.



5 Explain **two** strengths of classical conditioning.

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6 In learning theories you will have studied classical conditioning.

(a) Using an example, define 'extinction' as a feature of classical conditioning.

(2)

(b) Explain **one** strength and **one** weakness of classical conditioning.

(4)

Strength

Weakness



Learning theories

4 You will have learned about the classic study by Watson and Rayner (1920).

(a) Describe the procedure of the classic study by Watson and Rayner (1920).

(3)

(b) Explain **two** weaknesses of the classic study by Watson and Rayner (1920).

(4)

1

8 Evaluate classical conditioning as a theory to explain human behaviour.

(8)



8 You will have learned about the classic study by Watson and Rayner (1920) Little Albert.

Evaluate the classic study by Watson and Rayner (1920) Little Albert.

(8)



11 Evaluate the classic study by Watson and Rayner (1920).

(8)



10 Victor went to a local restaurant for a meal with friends. He ate pasta with a fish sauce but shortly afterwards he felt very poorly and was sick.

Two weeks later Victor walked past the restaurant and could smell the same fish sauce, which made him feel sick, so he hurried past. When his friends invited him to the restaurant again, Victor said he did not want to go.

(a) Using classical conditioning, describe why Victor may no longer want to go to the restaurant.

(4)

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(b) Explain **two** weaknesses of classical conditioning as an explanation of human behaviour.

(4)

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15 Evaluate Pavlov's (1927) experiment with salivation in dogs.

(8)



SUB-TOPIC

OPERANT CONDITIONING

5 questions in this booklet



Scenario: Learning theories

- 9** Ruhee receives reward points at school when she behaves extremely well, helps other students, and does extra research for her homework tasks. When she has 25 points, she can get a free snack at break time from the canteen. Ruhee always works hard to receive the points.

Using operant conditioning, describe why Ruhee works hard to receive the points.

Learning theories

- 4** As part of operant conditioning, you will have learned about behaviour modification, including 'shaping'.

Describe what is meant by behaviour shaping.

7 In learning theories you will have studied operant conditioning.

Explain **one** strength and **one** weakness of operant conditioning.

Strength

Weakness

6 Jack is two years of age and is learning to use the potty/toilet without the need for a nappy. His parents are trying to think of ways to encourage Jack to use the potty/toilet.

(a) Describe how Jack's parents could use operant conditioning to encourage him to use the potty/toilet.

(4)

(b) Bandura's (1961, 1963) original Bobo Doll experiments investigated the influence of social learning theory.

Using your knowledge of Bandura's (1961, 1963) original Bobo Doll experiments, suggest **one** way Jack's parents could use social learning theory to encourage Jack to use the potty/toilet.

(2)

- 5 Jayne owns a cafe called Rainfall and wants to encourage people to continue to buy coffee from her shop. She decides to give her customers a card where they can accumulate cup shaped stamps when they buy a hot drink. Once Jayne's customers have been given 10 stamps they are given a free hot drink.

(a) Identify the primary reinforcer and secondary reinforcer in this scenario.

(2)

Primary reinforcer

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Secondary reinforcer

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(b) Describe how Jayne could use **two** schedules of reinforcement to encourage her customers to buy hot drinks from her cafe.

(4)

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SUB-TOPIC

SOCIAL LEARNING THEORY

12 questions in this booklet



14 Explain **one** strength of Bandura et al.'s (1961) Bobo doll experiment.



- 6 Mr Peel is a Headteacher of a school. On Monday he started spending his lunchtimes picking up litter from the playground. The school's caretaker thanks Mr Peel in front of the children for picking up the litter. By Wednesday, several children pick up litter, resulting in the caretaker thanking the children.

Using social learning theory, describe why the children started to pick up litter.

12 Spencer is 12 years old, and his brother Mark is 16 years old. Spencer watched Mark wash their mum's car and receive £5.00. The next time Mark was asked to wash his mum's car, Spencer asked if he could help Mark. Mark showed Spencer how to wash one of the wheels with the sponge and soapy water, and then Spencer washed the other three wheels of the car.

Spencer helped Mark wash the car several times. One day, Spencer was asked by his mum if he would like to wash the car on his own. Spencer washed the car and received £5.00.

Describe how social learning theory could account for Spencer learning to wash the car.

5 You will have learned about Bandura's (1961) Bobo doll experiment.

(a) State **one** aim of Bandura's (1961) Bobo doll experiment.

(1)

(b) Explain **one** strength of Bandura's (1961) Bobo doll experiment.

(2)

(c) Explain **one** improvement you could make to Bandura's (1961) Bobo doll experiment.

(2)

7 Hugo passed his driving test one year ago. Recently, he received three penalty points for driving in excess of the speed limit. His father already has nine penalty points on his driving licence for speeding.

- (a) Using your knowledge of social learning theory, explain why Hugo may have driven in excess of the speed limit.

(4)

- (b) Explain **one** weakness of social learning theory.

(2)

10 Tom has a daughter called Holly who is 18 months old. Tom is trying to teach Holly how to use a fork by demonstrating to her how he holds it. He also shows Holly how to use the fork to pick up food and says “well done” to her every time she uses the fork correctly. Holly smiles and laughs each time she picks up some food with the fork.

Discuss how social learning theory could account for Holly using a fork on her own. You must make reference to the context in your answer.

(8)



10 Evaluate social learning theory as an explanation of human behaviour.

(8)



11 Evaluate Bandura's (1965) Bobo doll experiment with vicarious reinforcement.

(8)



5 As part of your psychology course you will have covered social learning theory.

(a) Define what is meant by 'retention' as used in social learning theory.

(1)

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(b) Define what is meant by 'reproduction' as used in social learning theory.

(1)

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(c) Explain **one** strength of social learning theory.

(2)

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(d) Explain **two** weaknesses of social learning theory.

(4)

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9 Evaluate Bandura's (1965) Bobo doll experiment with vicarious reinforcement.

(8)



- 7 Mia, Tilly and Nikki are triplets who leave toys all around the house. Their dad, Peter, shows them how to put their toys away in the toy cupboard. The triplets also watch Brittany, their older sister, help their dad put away their dolls, colouring books and pencils.

Peter thanks Brittany for helping and this makes her happy. Mia picks up her doll and puts it in the toy cupboard. Brittany says, "Well done" and Mia smiles. All the triplets then start putting their toys away.

Discuss how social learning theory could explain why the triplets began to put their toys away.

You must make reference to the context in your answer.

(8)



- 9 As part of your AS Psychology specification you were required to learn about the classic study Raine et al. (1997) and research carried out by Bandura (1961, 1963, 1965).

To what extent do Raine et al. (1997) and Bandura (1961, 1963, 1965) have real-life applications?

(12)



SUB-TOPIC

PHOBIAS AND THERAPIES

9 questions in this booklet



- 7 As part of learning theories, you will have studied treatments for phobias, including systematic desensitisation.

Explain **one** strength of systematic desensitisation as a treatment for phobias.



- 6 Matilda has been diagnosed with a phobia of buttons. She has been undergoing systematic desensitisation therapy for three months, which has been unsuccessful. Her therapist has decided to try an alternative treatment for her phobia.

Describe **one** treatment, other than systematic desensitisation, that the therapist could use with Matilda.



7 Evaluate systematic desensitisation as a treatment for phobias.

(8)



- 8 Bertie wanted to investigate the severity of symptoms for older and younger patients after treatment for a phobia.

He sampled two groups of patients who had received treatment and were recovering from a phobia:

- 20 patients aged between 20–35 years
- 20 patients aged between 40–55 years.

Bertie asked the patients to rate the severity of their symptoms after treatment. He used a rating scale ranging from 1–10, where 1–5 was judged as ‘less severe’ symptoms and 6–10 was judged as ‘more severe’ symptoms.

Bertie’s results are shown in **Table 2** below.

Age group	Patients with ‘less severe’ symptoms after treatment	Patients with ‘more severe’ symptoms after treatment
20–35 years	5	15
40–55 years	11	9

Table 2

- (a) Complete **Table 3** to calculate the chi-squared test for Bertie's data to **two** decimal places.

(4)

		Observed	Expected	O-E	(O-E) ²	(O-E) ² /E
20–35 years	Patients with 'less severe' symptoms after treatment	5	8			
	Patients with 'more severe' symptoms after treatment	15	12			
40–55 years	Patients with 'less severe' symptoms after treatment	11	8			
	Patients with 'more severe' symptoms after treatment	9	12			
Chi-squared =						

Table 3

SPACE FOR CALCULATIONS

Chi-squared (χ^2)

(b) Explain **one** strength of Bertie's study in terms of reliability.

(2)

(c) Explain **one** improvement that Bertie could make to his study in terms of validity.

(2)



14 Astrid has a fear of flying. She experienced a flight with heavy turbulence when returning from a holiday and since then has been unable to board a plane. Astrid has tried going on a flight simulator to help her with her fear of flying, however this made her panic and the simulator had to be stopped for Astrid to get off.

Her friend is getting married overseas next year. Astrid wants to attend the wedding and will need to fly there, so she is considering systematic desensitisation to reduce her fear of flying.

Discuss how systematic desensitisation could be used to help Astrid with her fear of flying.

(8)

8 Evaluate **one** treatment for phobias based on theories of learning, other than systematic desensitisation.

(8)



11 Dora has a phobia of boxes. When she was young, her parents bought her a toy in a box. Every time she lifted the lid of the box, a clown jumped out and scared her. Since then, she has been unable to open boxes and is frightened about what could be inside them.

Dora's family members open all boxes for her and reassure her that there is nothing dangerous inside each time. Dora regularly becomes upset when a box is delivered to the house. Her family members calm her down by making her a cup of tea and sitting with her until she feels safe.

Discuss how learning theories can explain the acquisition and maintenance of Dora's phobia of boxes.

(8)

5 Winston is afraid of storms. During a recent work trip, Winston experienced several hours of turbulence caused by the aeroplane flying through a storm. As the aeroplane bumped around, many of the passengers began to scream and some bags fell out of the overhead lockers. This trip scared Winston and he has developed a phobia of flying.

(a) Using classical conditioning, describe how Winston developed a phobia of flying. (4)

(b) Explain **two** weaknesses of classical conditioning. (4)

1

14 Assess whether systematic desensitisation is an effective treatment for phobias.

(8)



SUB-TOPIC

ANIMAL RESEARCH AND LEARNING

4 questions in this booklet



12 There are many pieces of research that have used animals within psychology.

Explain the practical issues of using animals in psychological research.

(4)



6 In learning theories, you will have learned about one of the following contemporary studies:

- Becker et al. (2002)
- Bastian et al. (2011)
- Capafóns et al. (1998).

(a) State **one** aim of your chosen contemporary study.

(1)

(b) Describe the results of your chosen contemporary study.

(2)



(c) Explain **one** strength and **one** weakness of your chosen contemporary study.

(4)

Strength

Weakness



- 5 Zaid conducted an animal study investigating the influence of different schedules of reinforcement on the time taken to complete a maze. Before going ahead with his study he gained the relevant licences for researching with animals from the Home Office. He separated rats into two groups to assess the impact of different amounts of food (variable ratio) against a specific amount of food (fixed ratio) as a reward for completing the maze successfully. He recorded the amount of time taken for the completion of the maze using a stopwatch and analysed his data to see if there was a difference between the two groups of rats.

(a) State the independent variable (IV) and dependent variable (DV) for Zaid's study.

(2)

Independent variable (IV)

Dependent variable (DV)

(b) Describe **one** ethical issue that Zaid needed to consider before conducting his study, which would have helped him gain a Home Office licence.

(2)

(c) Explain **two** weaknesses of using animals in psychological research.

(4)

1



10 Zoë investigated the use of operant conditioning in training two different animals. She trained squirrels and mice to successfully complete a maze that she had designed.

Zoë used positive reinforcement with the squirrels and mice, by giving each animal two acorns every time it found the way out of the maze. She recorded the length of time it took each animal to complete the maze successfully.

(a) Using the Scientific Procedures Act (1986), state **two** considerations Zoë would have made for her research with squirrels and mice.

(2)

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(b) State a fully operationalised directional (one-tailed) experimental hypothesis for Zoë's investigation.

(2)

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(c) Explain **one** strength of Zoë's research in terms of reliability.

(2)

(d) Explain **one** improvement that could be made to Zoë's investigation in terms of validity.

(2)

SUB-TOPIC

METHODS, STUDIES AND PRACTICAL INVESTIGATION

22 questions in this booklet



- 13** You and a friend are undertaking an observation to see how many people in a supermarket help you to reach something on the top shelf.

Describe how you would carry out the observation in the supermarket.

(3)

7 You were required to carry out a practical investigation when studying learning theories.

Describe the procedure for your practical investigation in learning theories.



- 9 Bradley decided to use a content analysis to investigate how much violence is shown in children's television programmes.

Describe how Bradley could use a content analysis to investigate violence in children's television programmes.



10 Marigold is a teacher at a primary school. She is concerned about the behaviour of a nine-year-old boy in her class. The boy often refuses to sit on a chair at his desk, instead he sits on the floor next to Marigold. When he is asked to sit at his desk, he leaves the classroom and sits in the corridor.

Marigold decides to use behaviour shaping. She hopes to encourage him to first sit on a chair next to her, and then eventually shape his behaviour until he sits on a chair at his desk.

Explain **one** strength and **one** weakness of Marigold using behaviour shaping to encourage the boy to sit on a chair at his desk.

Strength

Weakness

8 Theresa wanted to investigate children’s colour preferences. She placed green and orange bucket and spade sets at the entrance to a beach, with a sign saying, “Free for children to use”. Theresa sat out of sight and observed which coloured sets the children picked up when entering the beach.

Theresa’s results are shown in **Table 3**.

Gender of child	Green bucket and spade set	Orange bucket and spade set
Boys	5	2
Girls	3	4

Table 3

(a) Identify the type of observation used by Theresa in her investigation.

(1)

(b) Explain **one** strength and **one** weakness of Theresa using an observation for her investigation into children’s colour preferences.

(4)

Strength

Weakness

- 13** Rahul conducted an observation to investigate whether car size affects driving behaviour. He collected data from observing cars on a nearby road.

Rahul stood near a sign which displayed the speed of cars approaching the sign. He recorded whether the car was driving above or below the speed limit and also whether the car was a large car (5 doors) or a small car (3 doors).

The results from Rahul's investigation are shown in **Table 2**.

Size of car	Speed of car	
	Below the speed limit	Above the speed limit
Large car	10	12
Small car	19	6

Table 2



- (a) Complete **Table 3** to calculate the chi-squared test for Rahul’s investigation. You must give your answer to **two** decimal places.
- (4)

		Observed	Expected	O–E	(O–E) ²	(O–E) ² /E
Large car	Below the speed limit	10	13.57			
	Above the speed limit	12	8.43			
Small car	Below the speed limit	19	15.43			
	Above the speed limit	6	9.57			
Chi-squared =						

Table 3

SPACE FOR CALCULATIONS

Chi-squared (χ^2)

- (b) Rahul had a one-tailed (directional) hypothesis with $df = 1$ and used $p = 0.025$ as his level of significance.
- Determine whether there was a significant difference between the speed at which the large and small cars were being driven.
- (1)

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(Total for Question 13 = 5 marks)

7 (a) Describe content analysis as a research method used in psychology.

(4)

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(b) Explain **one** weakness of content analysis as a research method used in psychology.

(2)

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4 (a) State **one** factor that would make a psychological study scientific.

(1)

(b) Explain whether Pavlov's (1927) experiment with salivation in dogs could be considered scientific.

(4)

(c) Suggest **one** way in which Pavlov's (1927) experiment with salivation in dogs could have been improved.

(2)



SECTION 2: LEARNING THEORIES

11 Mandeep and Priya used a content analysis to investigate how gender is presented in two children’s television programmes. To record the data a tally chart was used.

Table 3 shows the data they gathered.

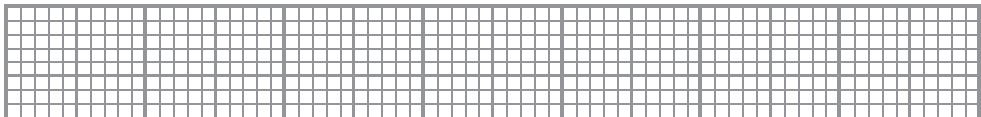
	Programme 1	Programme 2	Total
Emotional female	### //	## ////	16
Emotional male	//	/	3
Strong female	##	///	8
Strong male	## ##	## /	16
Sporty female	///	////	7
Sporty male	///	## ##	13

Table 3

(a) Draw a bar chart to show the total number of sporty males and sporty females shown in Table 3.

(3)

Title



(b) Explain **one** conclusion that could be drawn from Mandeep and Priya's investigation.

(2)

(c) Explain **one** methodological issue there may have been with Mandeep and Priya's content analysis.

(2)

13 In your studies of learning theories you will have conducted a practical investigation.

(a) Describe the procedure from your learning theories practical investigation.

(3)

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(b) Explain **two** improvements that you could make to your learning theories practical investigation.

(4)

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9 Archie conducted an observation to see whether boys are more likely to play with gender stereotypical toys than girls. He visited a pre-school where he observed children aged between three and four years old playing with toys.

(a) Describe how Archie may have gained informed consent to conduct his observation.

(2)

Archie recorded the first choice of toy that each boy and girl at the pre-school chose to play with.

Table 2 shows the number of boys and girls that Archie recorded as playing with a gender stereotypical boys' toy or gender stereotypical girls' toy.

Gender of child	Type of toy played with	
	Stereotypical boys' toy	Stereotypical girls' toy
Boys	8	12
Girls	10	11

Table 2



(b) Complete **Table 3** to calculate the chi-squared test for Archie’s observation. You must give your answer to **two** decimal places.

(4)

		Observed	Expected	O–E	(O–E) ²	(O–E) ² /E
Boys	Stereotypical boys’ toy	8	8.78			
	Stereotypical girls’ toy	12	11.22			
Girls	Stereotypical boys’ toy	10	9.22			
	Stereotypical girls’ toy	11	11.78			
Chi-squared =						

Table 3
SPACE FOR CALCULATIONS

Chi-squared (χ^2)

(c) Archie had a one-tailed (directional) hypothesis with $df=1$ and used $p=0.05$ as his level of significance.

Determine whether there is a significant difference between boys and girls in the choice of gender stereotypical toys.

(1)

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(Total for Question 9 = 7 marks)

14 Learning theories have been used to explain key questions of relevance to today's society.

Discuss the key question for society you have studied using concepts, theories and/or research from learning theories.

(8)

Key question



13 When studying learning theories you will have covered the observational research method for human research.

Evaluate the usefulness of observational methods for studying human behaviour.

(8)



- 7** Learning theories have been used to explain key questions of relevance to today's society.

Discuss the key question for society you have studied using concepts, theories and/or research from learning theories.

(8)

Key question

13 Mischa is investigating the healthy and unhealthy food choices made by people and decides to use the observational method. For one day, he observed the food purchased by customers in a local café. Mischa gathered quantitative data in his observation.

(a) Describe how Mischa could use tallying to gather his quantitative data.

(2)

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(b) Describe the sampling technique used by Mischa to gather the participants for his observation.

(2)

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(c) Explain **two** improvements Mischa could make to his investigation.

(4)

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6 As part of your AS Psychology specification you were required to carry out a practical investigation when studying learning theories.

(a) Describe the aim of the practical investigation you carried out when studying learning theories.

(2)

(b) As part of your practical investigation you were required to analyse the findings to produce results, including a chi squared test.

Describe the results of your quantitative data analysis for the practical investigation you carried out when studying learning theories.

(3)

(c) Explain **two** strengths of the practical investigation you carried out when studying learning theories.

(4)

6 Claire recently got a new puppy and it will not sit when she commands it to. She is deciding whether to take her puppy to a dog training school. During the dog training class, a dog biscuit is given to the puppy as a treat when it sits after the owner commands it to.

Claire asked to observe a session of the dog training class before she decides to take her puppy to a training school.

The dog training classes were divided into two groups:

- Group A – 25 puppies that had received the training.
- Group B – 25 puppies that had not yet received the training.

Claire tallied the number of puppies in each group that sat when their owner commanded them to.

Claire’s results are shown in **Table 2** below.

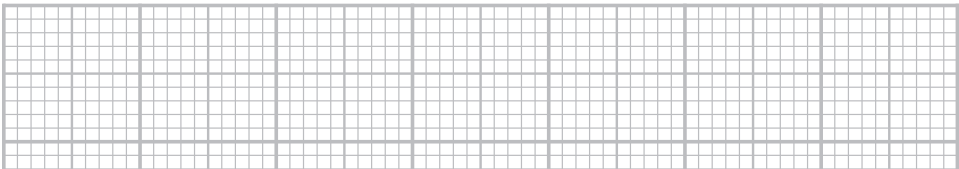
	Puppies that sat on command	Puppies that did not sit on command
Group A: Puppies that had received the training	20	5
Group B: Puppies that had not yet received the training	10	15

Table 2

(a) Draw a bar chart to display the number of puppies in each group that sat on command using the data from **Table 2**.

(3)

Title



(b) Complete **Table 3** to calculate the chi-squared for Claire’s data to **two** decimal places.

(4)

		Observed	Expected	O–E	(O–E) ²	(O–E) ² / E
Group A: Puppies that had received the training	Puppies that sat on command	20	15			
	Puppies that did not sit on command	5	10			
Group B: Puppies that had not yet received the training	Puppies that sat on command	10	15			
	Puppies that did not sit on command	15	10			
Chi-squared =						

Table 3

SPACE FOR CALCULATIONS

Chi-squared (χ^2)

(c) Explain **one** strength of Claire using quantitative data in her investigation.

(2)



4 As part of your psychology course you were required to carry out a practical investigation when studying learning theories.

(a) State the hypothesis for your practical investigation in learning theories.

(2)

(b) Describe how you gathered quantitative data for your practical investigation in learning theories.

(2)

(c) Explain **one** conclusion that you made from the quantitative data for your practical investigation in learning theories.

(2)

(d) Explain **two** weaknesses of your practical investigation in learning theories.

(4)

1

6 As part of your psychology course, you were required to carry out a practical investigation when studying learning theories.

(a) Describe the results of the quantitative and qualitative data analysis from your practical investigation in learning theories.

(4)

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(b) Explain **one** weakness of your practical investigation in learning theories.

(2)

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(c) Explain **two** strengths of your practical investigation in learning theories in terms of validity.

(4)

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SECTION B: LEARNING THEORIES

- 5** Malcolm carried out a non-participant observation in a local nursery to find out whether older children or younger children are more aggressive.

(a) Describe non-participant observation as a human research method.

(3)

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(b) Describe how Malcolm could use event sampling in his non-participant observation at the local nursery.

(2)

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Malcolm observed 12 children from the local nursery:

- six children aged one to two years old (Group A)
- six children aged three to four years old (Group B).

The results of Malcolm’s observation are shown in **Table 1**.

Group A	Number of aggressive acts observed for children aged one to two years old	Group B	Number of aggressive acts observed for children aged three to four years old
1	11	1	22
2	14	2	15
3	15	3	18
4	7	4	17
5	7	5	24
6	6	6	24
	Mean score = 10		Mean score = 20

Table 1

(c) Calculate the median number of aggressive acts observed for children aged one to two years old (Group A).

(1)

SPACE FOR CALCULATIONS

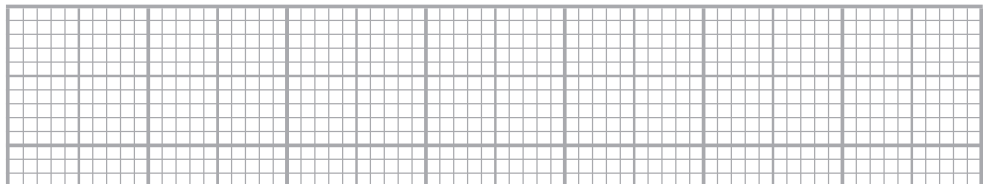
Median number of aggressive acts observed
for children aged one to two years old (Group A)

(d) Draw a bar chart to display the mean number of aggressive acts for children aged one to two years old (Group A) and for children aged three to four years old (Group B), as shown in **Table 1**. (3)

Title

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(e) Explain **one** participant variable that Malcolm could have controlled for when planning his observation at the local nursery. (2)

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SECTION D BEGINS ON THE NEXT PAGE.

SECTION D: LEARNING THEORIES

- 9** Malik carried out an observation in a local cinema to investigate which films males and females watch. Malik stood near two screen entrances where he could not be seen and tallied whether males and females entered the screen to watch either a horror film or a comedy film.

(a) Identify the type of observation that Malik used in this study.

(1)



(b) **Table 1** shows the number of males and females who watched either a horror film or a comedy film at the local cinema.

	Comedy Film	Horror Film
Males	### ### //	###
Females	### //	### ###

Table 1

Using the data from **Table 1**, draw a bar chart to represent the number of males and females who watched a horror film.

(3)

- (c) Complete **Table 2** to calculate the chi-squared test for Malik's study to **two** decimal places.

(4)

		Observed	Expected	O-E	(O-E) ²	(O-E) ² / E
Males	Comedy Films	12	9.5			
	Horror Films	5	7.5			
Females	Comedy Films	7	9.5			
	Horror Films	10	7.5			
Chi-squared =						

Table 2

SPACE FOR CALCULATIONS

Chi-squared (χ^2)

- (d) Malik had a two-tailed (non-directional) hypothesis with $df = 1$ and used $p=0.05$ as his level of significance.

Determine whether there is a significant difference between male and female film choice.

(1)

- (e) Malik used quantitative data for his study into film choice at the local cinema.

Explain **one** weakness of using quantitative data for Malik's study.

(2)

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- 8 Maddie works at a country park and is asked by the owner to introduce safety signs as part of new health and safety rules. She was asked by the country park owner to find out if visitors to the park would follow safety signs.

To test this, Maddie placed a sign saying 'Danger – footpath closed', as the footpath was dangerous after heavy rainfall. The sign instructed the visitors to immediately follow an alternative, safer footpath. They were told it would take longer but they would be rewarded for their inconvenience.

During the day, Maddie observed 32 visitors immediately follow the alternative, safer footpath. Maddie rewarded them with a free refreshment at the end of their visit. However, six visitors ignored the safety sign, putting themselves in danger, and were asked to leave the park.

Evaluate how well evolutionary theory and operant conditioning could explain the behaviour of the visitors.

You must make reference to the context in your answer.

(12)



MARK SCHEMES

official Pearson Edexcel mark schemes



11	AO1 (2 marks) One mark for each definition For example: Unconditioned response (UCR) • A response that is naturally occurring without any prior learning (1). Extinction • The loss of a conditioned response to the conditioned stimulus (1). Look for other reasonable marking points.	(2)
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Question Number	Answer	Mark
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12	AO2 (2 marks) One mark for identification of the conditioned stimulus (CS). One mark for identification of the conditioned response (CR). For example: • Conditioned stimulus (CS) is the chicken (1). • Conditioned response (CR) is fear (1). Look for other reasonable marking points. Answers must relate to the scenario. Generic answers score 0 marks.	(2)
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Question Number	Answer	Mark
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11	AO2 (2 marks) One mark for identification of the unconditioned stimulus (UCS) in relation to the scenario. One mark for identification of the neutral stimulus (NS) in relation to the scenario. For example: Unconditioned stimulus (UCS) - The scratch from the cat is the unconditioned stimulus (UCS) (1). Neutral stimulus (NS) - The cat is the neutral stimulus (NS) (1). Look for other reasonable marking points. Answers must relate to the scenario. Generic answers score 0 marks.	(2)
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Question Number	Answer	Mark
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Question Number	Answer	Mark
12	AO2 (4 marks) Up to four marks for an appropriate explanation For example: The unconditioned stimulus (UCS) would be the bang of the balloon and this would have caused fear which is the unconditioned response (UCR) (1). The neutral stimulus (NS) would be the clown which would have not caused a fearful response until the parties (1). The pairing of the balloon burst and the clown at several parties lead to her associating clowns and fear (1), which resulted in the conditioned stimulus (CS) of the clown causing a fear response (CR) (1). Look for other reasonable marking points. Answers must relate to the scenario. Generic answers score 0 marks.	(4)

Question Number	Indicative content	Mark

Question Number	Answer	Mark
5	AO1 (2 marks), AO3 (2 marks) One mark for identification of each strength (AO1). One mark for justification of each strength (AO3). For example: Strength one - Watson and Rayner (1920) claimed they classically conditioned a phobic response in a boy named Albert which resulted in him fearing various objects (1) therefore supporting classical conditioning theory as a way of explaining a new learned responses (UCS) such as the loud noise being paired with the rat (CS) to create a fear response(CR) which is what the theory suggests (1). Strength two - Classical conditioning theory has led to the development of treatments like systematic desensitisation to treat phobias by pairing the learned response with a non-fearful relaxation technique (1) which is supported by Gilroy et al. (2003) who used systematic desensitisation to treat patients with spider phobias giving the theory credibility (1). Look for other reasonable marking points.	(4)

Question Number	Answer	Mark
6 (a)	AO1 (2 marks) Up to two marks for a definition of extinction using an example. For example: Extinction is when there is no longer a conditioned response (CR) to a conditioned stimulus (CS) (1). For example, in Pavlov's salivating dogs' experiments when the bell was repeatedly presented without the food being present, the salivation response stopped (1). Look for other reasonable marking points.	(2)

Question Number	Answer	Mark
6(b)	AO1 (2 marks), AO3 (2 marks) One mark for identification of strength/weakness (AO1). One mark for justification of strength/weakness (AO3). For example: Strength - Watson and Rayner (1920) claimed they conditioned a phobic response in a little boy named Albert which resulted in him fearing various objects including a rat (1) therefore supporting Classical conditioning as a way of explaining new learned responses such as the loud noise being paired with the rat to create a fear response (1). Weakness - Classical conditioning is an incomplete explanation of learning as it can only explain behaviour resulting from a conditioned stimulus-response (1) whereas social learning theory would suggest that learning behaviour can also involve observing and imitating others and not through a conditioned stimulus-response (1). Look for other reasonable marking points.	(4)

Number		
4(a)	AO1 (3 marks) Up to three marks for a description of the procedure. For example: Little Albert was initially tested using a variety of objects including a white rat and dog to ensure he was not scared of them (1). From the age of 11 months and three days a white rat was presented to Little Albert whilst at the same time a hammer was struck on a metal bar (1) Little Albert underwent seven pairings of the rat and noise in two sessions, one week apart (1). Look for other reasonable marking points.	(3)

Question Number	Answer	Mark
4 (b)	AO1 (2 marks), AO3 (2 marks) One mark for identification of each weakness (AO1). One mark for justification of each weakness (AO3). For example: Weakness one - Watson and Rayner (1920) Little Albert study lacks generalisability as they used only one infant aged around 11 months, reported to be healthy (1) which is not representative of adults who may be more difficult to condition to fear therefore decreasing population validity (1). Weakness two - Little Albert's response of crying when being presented with the rat whilst a bar was struck behind him may be an artificial measurement of fear (1) as the study was conducted in an unnatural laboratory setting for an 11 month old child therefore ecological validity would be reduced as his behaviour may not have been natural (1). Look for other reasonable marking points.	(4)

8	AO1 (4 marks), AO3 (4 marks)	(8)
	AO1 • Classical conditioning assumes learning is by association • Natural reflexes are paired with neutral stimuli • Repeated association of the UCS and NS lead to the NS becoming the CS which causes the CR • Repeated pairing of an emetic drug with alcohol can lead to alcohol causing nausea AO3 • Watson and Rayner (1920) claimed they conditioned a child to fear various objects • Capafóns et al. (1998) used SD which is based on classical conditioning to treat patients who had a phobia of flying • SD lacks validity to real life situations although the use of virtual reality (VR) or hypnosis-guided SD (HGSD) can be used • Pavlov's (1927) study is used as evidence for classical conditioning but used dogs so has limited generalisability to humans Look for other reasonable marking points.	

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



SECTION C

Question Number	Indicative content	Mark
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8	AO1 (4 marks), AO3 (4 marks) AO1 - The sample consisted of one boy aged around 9 months old at the beginning of the study. - Little Albert was presented with a variety of objects including a white rat. - At 11 months old when Albert went near the white rat, the researchers struck a steel bar behind his head. - Eventually Albert would whimper when the white rat was present without the noise. AO3 - There was only one boy in the sample which is not generalisable to females and adults. - Prior to the research Little Albert was tested for his fear of different objects which showed the researchers had conditioned the fear. - The study had a standardised procedure of pairing the white rat with the loud noise and therefore increasing reliability. - There are ethical issues as Little Albert was deliberately upset and may have been psychologically harmed by making him afraid of rats. Look for other reasonable marking points.	(8)
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Level	Mark	Descriptor
AO1 (4 marks), AO3 (4 marks) Candidates must demonstrate an equal emphasis between knowledge and understanding vs evaluation / conclusion in their answer.		
	0	No rewardable material.
Level 1	1-2 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) A conclusion may be presented, but will be generic and the supporting evidence will be limited. Limited attempt to address the question. (AO3)
Level 2	3-4 Marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a superficial conclusion being made. (AO3)
Level 3	5-6 Marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning. leading to a conclusion being presented. Candidates will demonstrate a grasp of competing arguments but evaluation may be imbalanced. (AO3)
Level 4	7-8 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical evaluation, containing logical chains of reasoning throughout. Demonstrates an awareness of competing arguments, presenting a balanced conclusion. (AO3)

Question Number	Answer	Mark
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11	AO1 (4 marks), AO3 (4 marks) AO1 • Watson and Rayner (1920) aimed to see if they could condition an emotional reaction in an infant aged between 9 and 11 months old through classical conditioning. • They initially tested Little Albert to see what he was naturally afraid of as a baseline measure of his phobic responses. • Little Albert was presented with a white rat and when he went to touch it they hit a metal bar with a hammer to cause an unconditioned fear response to a loud bang. • Watson and Rayner (1920) found that Little Albert showed a conditioned fear response to the white rat when it was presented without the loud bang of the hammer on the metal bar. AO3 • Little Albert was the only infant studied so the findings may not be representative of other children or the adult population. • There is some debate about whether the level of placid behaviour Albert showed was that of a fully healthy baby so the results may not be a valid outcome for conditioned reactions. • There were strict controls during the experiment, such as the timing of hitting the metal bar, so the study could be replicable in order to retest the results for reliability. • The findings about conditioning emotional reactions can be used to help develop therapies to treat phobias by pairing a phobic object with a relaxation response. Look for other reasonable marking points.	(8)
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Level	Mark	Descriptor
AO1 (4 marks), AO3 (4 marks) Candidates must demonstrate an equal emphasis between knowledge and understanding vs evaluation/conclusion in their answer		
	0	No rewardable material.
Level 1	1-2 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) A conclusion may be presented, but will be generic and the supporting evidence will be limited. Limited attempt to address the question. (AO3)
Level 2	3-4 Marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a superficial conclusion being made. (AO3)
Level 3	5-6 Marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning leading to a conclusion being presented. Candidates will demonstrate a grasp of competing arguments but evaluation may be imbalanced. (AO3)
Level 4	7-8 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical evaluation, containing logical chains of reasoning throughout. Demonstrates an awareness of competing arguments, presenting a balanced conclusion. (AO3)



Issues and Debates

Question Number	Indicative Content	Mark
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10 (a)	AO2 (4 marks) Up to four marks for a description of classical conditioning in relation to the scenario. For example: The unconditioned stimulus would be the pasta in fish sauce that resulted in an unconditioned response of being sick (1). The restaurant was the neutral stimulus that produced no instinctive reaction from Victor (1). When the unconditioned stimulus of fish sauce was paired with the neutral stimulus of the restaurant it became a conditioned stimulus (1), resulting in the restaurant triggering Victor's conditioned response of feeling sick, so he no longer wants to go (1). Look for other reasonable marking points. Generic answers score 0 marks. Answers must relate to the scenario.	(4)
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Question Number	Answer	Mark
10 (b)	AO1 (2 marks), AO3 (2 marks) One mark for identification of each weakness (AO1) One mark for justification of each weakness (AO3) For example: - Classical conditioning cannot explain behaviours such as a fear where an individual has not encountered the stimulus for pairing to take place (1), so it cannot be applied to a wider range of learned behaviour unlike social learning theory which explains the process of learning behaviour through observing the actions of others (1). - Evidence supporting classical conditioning has largely taken place on animal subjects which may not be representative of how human associations form during learning (1), such as stages of classical conditioning being explained using the salivation responses of dogs in confinement which when extrapolated may not fully explain how humans are conditioned (1). Look for other reasonable marking points.	(4)

Question Number	Indicative Content	Mark
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15	AO1 (4 marks), AO3 (4 marks) AO1 • Pavlov (1927) used dogs to test whether the unconditioned stimulus-response of food-salivation could be conditioned to a neutral stimulus of a metronome which did not normally elicit a response in a dog. • The metronome (NS) was presented at the time that the UCS of food was given to the dog to pair the UCS and after several pairings the metronome elicited the conditioned response of salivation. • Pavlov removed the dog's oesophagus creating an opening in their throat so the food would fall out and not make it to the stomach to maintain the desire for the UCS of food. • By creating additional holes along the digestive system Pavlov collected various secretions to quantitatively measure the level of salivation in response to the stimuli. AO3 • The experiment is only a valid test of classical conditioning in dogs, so it does not represent the process of classical conditioning in humans who have more complex thinking skills than dogs. • The pairing process was reliable as the dogs were in a harness and the conditions were well controlled, such as sound proofing and no other stimuli than the metronome and food were present. • The treatment of the dogs could be considered unethical, with many dying unnecessarily from the procedure, which would not meet the current Animals (Scientific Procedures) Act 1986 guidelines for ethics. • The objective measurement of the salivation responses gives scientific credibility to the findings about stimulus-response pairing and the process of classical conditioning. Look for other reasonable marking points.	(8)
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Level	Mark	Descriptor
AO1 (4 marks), AO3 (4 marks) Candidates must demonstrate an equal emphasis between knowledge and understanding vs evaluation/conclusion in their answer		
	0	No rewardable material.
Level 1	1-2 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) A conclusion may be presented, but will be generic and the supporting evidence will be limited. Limited attempt to address the question. (AO3)
Level 2	3-4 Marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a superficial conclusion being made. (AO3)
Level 3	5-6 Marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning leading to a conclusion being presented. Candidates will demonstrate a grasp of competing arguments but evaluation may be imbalanced. (AO3)
Level 4	7-8 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical evaluation, containing logical chains of reasoning throughout. Demonstrates an awareness of competing arguments, presenting a balanced conclusion. (AO3)

Issues and Debates

Question Number	Indicative Content	Mark
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9	AO2 (2 marks) Up to two marks for a description of operant conditioning in relation to the scenario. For example: Reward points are positive reinforcement that encourage Ruhee to work hard in order to receive the desirable consequence of the points for things like homework (1). The points are a secondary reinforcer that Ruhee wants to accumulate to exchange for the primary reinforcer of snacks at break time (1). Look for other reasonable marking points. Generic answers score 0 marks. Answers must relate to the scenario.	(2)
Question Number	Answer	Mark

Question Number	Answer	Mark
4	AO1 (2 marks) Up to two marks for a description of behaviour shaping. For example: • Behaviour shaping involves reinforcing behaviours through successive approximations that would not usually occur (1). This happens through step-by- step reinforcement of different behaviours until the desired one is achieved (1). Look for other reasonable marking points.	(2)



Question Number	Answer	Mark
7	AO1 (2 marks), AO3 (2 marks) One mark for identification of a strength/weakness (AO1). One mark for justification of the strength/weakness (AO3). For example: Strength • Skinner's (1948) animal studies showed rats would learn by the desired consequences of a reward to repeat a behaviour (1) which is shown by them repeatedly pressing the lever after food was presented so supports positive reinforcement in learning (1). Weakness • One weakness of operant conditioning is that it ignores hormonal imbalances as a reason for human behaviour (1) because changes in hormone levels could account for human behaviour such as aggression, and not due to the consequences of an action (1). Look for other reasonable marking points.	(4)

6(a)	AO2 (4 marks) Up to four marks for relevant description of operant conditioning to Jack (AO2). For example: Jack's parents could use positive reinforcement by giving him a sticker when he uses the potty/toilet, which is a reward to encourage him to use the potty/toilet again (1). A sticker would be an example of a secondary reinforcer or they could give him food, which is a primary reinforcer (1). Jack's parents could remove vegetables from his dinner, which Jack doesn't like (1). They could shout at him when he doesn't use the potty/toilet, which is punishment to discourage him from using a nappy (1). Look for other reasonable marking points. Answers must relate to the scenario. Generic answers score 0 marks.	(4)
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Question Number	Answer	Mark
6(b)	AO1 (1 mark), AO2 (1 mark) One mark for a relevant piece of information used from Bandura's study (AO1). One mark for relevant application to Jack's scenario (AO2). For example: Bandura found children would observe and imitate aggressive behaviour towards a Bobo doll (1) and Jack may observe his parents using the toilet so imitate this behaviour (1). Look for other reasonable marking points. Answers must relate to the scenario. Generic answers score 0 marks.	(2)



5(a)	AO2 (2 marks) One mark for each reinforcer correctly identified. Primary reinforcer • Free hot drink. (1) Secondary reinforcer • Cup shaped stamps. (1) Look for other reasonable ways of expressing the primary and secondary reinforcer.	(2)
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Question Number	Answer	Mark
5(b)	AO1 (2 marks), AO2 (2 marks) One mark for identification of each schedule of reinforcement that could be used, up to a maximum of two marks (AO1) One mark for each application of the schedule of reinforcement to Jayne's scenario, up to a maximum of two marks (AO2) For example: • A fixed interval schedule is where a reward is given after specified amounts of time such as once a month (1). Jayne could give a stamp to every customer on the first of each month if they have bought a coffee at some point during the month (1). A variable ratio schedule is where a different amount of reward is provided after a desired behaviour (1). So Jayne could give a different amount of stamps for each product they buy from her cafe (1). Look for other reasonable marking points.	(4)

14	AO1 (1 mark), AO3 (1 mark) One mark for identification of a strength (AO1) One mark for justification of the strength (AO3) For example: Bandura (1961) had a standardised procedure as all the children were observed for 20 minutes in five second intervals whilst in the room with toys (1). This increases the reliability of the findings about imitative aggression because the study can be fully replicated to check the results for consistency (1). Look for other reasonable marking points.	(2)
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Question Number	Indicative Content	Mark
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6**AO2 (4 marks)****(4)**

Up to four marks for a description of social learning theory in relation to the scenario.

For example:

- The children observe Mr Peel picking up the litter, who may be their role model as he would have power as their Headteacher (1). The children had the ability to reproduce the litter-picking behaviour as there would have been litter in the playground where they play (1). After observing Mr Peel pick up the litter, the children retained his behaviour, reproducing it on the third day (1). As the caretaker thanks Mr Peel, the children began to pick up litter due to vicarious reinforcement as they wanted to be thanked too (1).

Look for other reasonable marking points. Answers

must relate to the scenario.

Generic answers score 0 marks.



12	AO2 (4 marks) Up to four marks for a description of social learning theory in relation to the scenario. For example: • Spencer may identify with his brother Mark as a role model as they are the same gender and Mark has a higher status being older than Spencer (1). While Mark is showing Spencer how to wash the wheels, Spencer is retaining the information and replicates this by washing the 3 other wheels (1). Spencer watched Mark gain £5.00 for washing the car which acts as vicarious reinforcement to Spencer who may also desire £5.00 (1). After helping his brother wash the car several times, this gave Spencer high self-efficacy, which led him to confidently wash the car by himself when his mum later asked him to (1). Look for other reasonable marking points. Answers must relate to the scenario. Generic answers score 0 marks.	(4)
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Question Number	Answer	Mark
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Question Number	Answer	Mark
5(a)	AO1 (1 mark) One mark for stating the aim of Bandura's (1961) Bobo doll experiment. For example: Aimed to see if aggressive behaviour could be acquired through the observation of aggressive role models (1). Look for other reasonable marking points.	(1)

Question Number	Answer	Mark
5(b)	AO1 (1 mark), AO3 (1 mark) One mark for identification of a strength (AO1) One mark for justification of the strength (AO3) For example: Bandura controlled for individual differences in the children by matching them on their levels of aggression prior to the observation (1) meaning he could be sure that it was the role models' behaviour that affected whether the children acted aggressively or not therefore increasing internal validity (1). Look for other reasonable marking points.	(2)

Question Number	Answer	Mark
5(c)	AO1 (1 mark), AO3 (1 mark) One mark for identification of an improvement (AO1). One mark for justification of the improvement (AO3). For example: One improvement to Bandura (1961) study would be to observe the children acting aggressively in their own real-life environments (1) which would result in being able to observe the children's real life behaviour in relation to whether they are aggressive which would increase ecological validity (1). Look for other reasonable marking points.	(2)

7(a)	AO2 (4 marks) Up to four marks for an explanation of social learning theory in relation to Hugo's behaviour. For example: Hugo may have observed his father speeding who was his role model (1). He had the ability to reproduce the speeding as he recently passed his driving test and has a car (1). He may have found speeding exciting and therefore was internally motivated to speed again in the future (1). Hugo's friends may have praised him for his fast driving so this provided external motivation to reproduce the speeding behaviour (1). Look for other reasonable marking points. Answers must relate to the scenario. Generic answers score 0 marks.	(4)
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Question Number	Answer	Mark
7(b)	AO1 (1 mark), AO3 (1 mark) One mark for a weakness identified (AO1). One mark for justification of that weakness (AO3). For example: One weakness of social learning theory is that it ignores hormonal imbalances as a reason for human behaviour (1), so biological theory may account for human behaviour that has not been learnt through observation (1). Look for other reasonable marking points.	(2)

Question Number	Indicative Content	Mark
10	AO1 (4 marks), AO2 (4 marks) AO1 • Social learning involves an individual admiring a role model and copying their behaviour. • Social learning involves attention, which is the process of noticing and being interested in the behaviour. • If an individual is rewarded they are more likely to reproduce the learned behaviour and continue displaying it in future. • The learned behaviour may make the individual feel proud or good internally so serve as self-reinforcement. AO2 • Holly may see her father as a role model and want to imitate his behaviour with the fork. • Holly will notice and be interested in how her father holds the fork and how he stabs the food. • Tom saying “well done” to Holly for using the fork correctly is a reward, which will encourage Holly to use her fork again. • Holly is smiling and laughing when stabbing the food with the fork correctly so this could show she is proud and so is self-reinforcement. 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.		
Level 0	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)

Section E – Issues and Debates



10	AO1 (4 marks), AO3 (4 marks) AO1 • Social learning theory suggests that people learn through watching what others do, copying their actions and in doing so learning new behaviour. • Social learning theory proposes that role models are more likely to be copied if they are the same age and sex of the observer. • Vicarious reinforcement is experienced when an observer witnesses the model being rewarded with something for the behaviour they show. • Bandura (1977) suggested that there are four processes that influence whether a role model is copied – attention, retention, reproduction and motivation. AO3 • Bandura, Ross and Ross (1961) found that children who observed an aggressive role model made more imitative aggressive actions of behaviour than the non-imitative or control group. • Kendler et al. (2015) found that identical twins are more likely to show higher levels of aggression than non-identical twins indicating a genetic link to aggression. • By rewarding powerful and high-status role models like Dwayne 'The Rock' Johnson stricter censorship laws may be needed to restrict children's access to observing characters like this. • Bandura (1961) observed children in his study on modelled aggression therefore may not be representative of how adults learn aggressive behaviour. Look for other reasonable marking points.	(8)
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Level	Mark	Descriptor
AO1 (4 marks), AO3 (4 marks) Candidates must demonstrate an equal emphasis between knowledge and understanding vs evaluation/conclusion in their answer.		
	0	No rewardable material.
Level 1	1-2 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) A conclusion may be presented, but will be generic and the supporting evidence will be limited. Limited attempt to address the question. (AO3)
Level 2	3-4 Marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a superficial conclusion being made. (AO3)
Level 3	5-6 Marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning leading to a conclusion being presented. Candidates will demonstrate a grasp of competing arguments but evaluation may be imbalanced. (AO3)
Level 4	7-8 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical evaluation, containing logical chains of reasoning throughout. Demonstrates an awareness of competing arguments, presenting a balanced conclusion. (AO3)

11	AO1 (4 marks), AO3 (4 marks) AO1 - The participants were 33 boys and 33 girls aged between 42 months and 71 months from the Stanford University Nursery school. - The children were randomly assigned to three different groups with 11 boys and 11 girls in each group. - A 5-minute film of a male role model being aggressive to the Bobo doll was shown to the children after which they watched the model be either rewarded, punished or given no consequences. - Two observers then observed the children's behaviour for 10 minutes in a different room playing with the Bobo doll. AO3 - The participants were of an equal gender mix which prevents androcentric bias in findings, so they are more generalisable to children of both genders. - Randomisation means they were not matched for prior aggression levels so one group may have had higher aggression prior to exposure to the role model. - The standardised film clip showing the process of vicarious reinforcements give internal consistency in the exposure to the role model conditions, increasing the reliability of the findings. - A 10-minute observation may not reflect how vicarious reinforcement influences children's learned behaviour in the long-term, limiting the application of the findings about learned aggression. Look for other reasonable marking points.	(8)
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Level	Mark	Descriptor
AO1 (4 marks), AO3 (4 marks) Candidates must demonstrate an equal emphasis between knowledge and understanding vs evaluation/conclusion in their answer		
	0	No rewardable material.
Level 1	1-2 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) A conclusion may be presented, but will be generic and the supporting evidence will be limited. Limited attempt to address the question. (AO3)
Level 2	3-4 Marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a superficial conclusion being made. (AO3)
Level 3	5-6 Marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning leading to a conclusion being presented. Candidates will demonstrate a grasp of competing arguments but evaluation may be imbalanced. (AO3)
Level 4	7-8 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical evaluation, containing logical chains of reasoning throughout. Demonstrates an awareness of competing arguments, presenting a balanced conclusion. (AO3)

Issues and Debates

Question Number	Indicative Content	Mark
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Question Number	Answer	Mark
5 (a)	AO1 (1 mark) One mark for a definition of retention as used in social learning theory. For example: Retention is the memory of the behaviour to be performed later by the observer (1). Look for other reasonable marking points.	(1)

Question Number	Answer	Mark
5 (b)	AO1 (1 mark) One mark for a definition of reproduction as used in social learning theory. For example: Reproduction is when an individual has the ability to recreate the behaviour their role model has displayed (1). Look for other reasonable marking points.	(1)

Question Number	Answer	Mark
5(c)	AO1 (1 mark), AO3 (1 mark) One mark for identification of a strength (AO1) One mark for justification of the strength (AO3) For example: Bandura, Ross and Ross (1961) found that children who observed an aggressive role model made more imitative aggressive actions of behaviour than the non-aggressive condition or control group (1) which supports social learning theory's ideas that people learn through observing what others do, copying their actions and in doing so learning new behaviour (1). Look for other reasonable marking points.	(2)

Question Number	Answer	Mark
5(d)	AO1 (2 marks), AO3 (2 marks) One mark for identification of each weakness (AO1) One mark for justification of each weakness (AO3) For example: - Brunner (1993) found high levels of aggression in males from the Netherlands also had a deficient MAOA gene (1) which is a weakness of social learning theory in that it does not consider the possibility that aggressive behaviour may have a genetic influence associated with disruption to the MAOA gene (1). - Research into social learning theory such as Bandura (1961) has been carried out with children making the results limited in generalisability (1) as the modelled behaviour displayed by the children may not be representative of adult behaviour with real life role models (1). Look for other reasonable marking points.	(4)

Question	Answer	Mark
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9	AO1 (4 marks), AO3 (4 marks) AO1 • Bandura (1965) used a sample of 66 children, 33 boys and 33 girls, with a mean age of 51 months, recruited from Stanford University Nursery School. • Once selected the children were randomly assigned to one of three equal groups with 11 in each. • The children watched a 5-minute film of four aggressive responses to a bobo doll which ended in the model receiving a reward, punishment or no consequence. • After watching television, the children were taken into a different room and observed by two observers playing for 10 minutes with a behaviour recorded every five seconds. AO3 • Using both male and female children in his sample Bandura (1965) ensured that the results of the different vicarious reinforcement conditions is representative of both genders. • By randomly assigning the children Bandura's (1965) groups may have been biased with more aggressive children all being placed into one group therefore affecting the results. • By allowing children to observe aggressive acts Bandura (1965) may have caused distress which would be considered unethical under current BPS guidelines. • By using two observers to record the behaviour of the children in the playroom inter-observer reliability was maintained. Look for other reasonable marking points.	(8)
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Level	Mark	Descriptor
AO1 (4 marks), AO3 (4 marks) Candidates must demonstrate an equal emphasis between knowledge and understanding vs evaluation/conclusion in their answer		
	0	No rewardable material.
Level 1	1-2 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) A conclusion may be presented, but will be generic and the supporting evidence will be limited. Limited attempt to address the question. (AO3)
Level 2	3-4 Marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a superficial conclusion being made. (AO3)
Level 3	5-6 Marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning leading to a conclusion being presented. Candidates will demonstrate a grasp of competing arguments but evaluation may be imbalanced. (AO3)
Level 4	7-8 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical evaluation, containing logical chains of reasoning throughout. Demonstrates an awareness of competing arguments, presenting a balanced conclusion. (AO3)

Question Number	Indicative content	Mark
7	A01 (4 marks), A02 (4 marks) A01 • Social learning theory involves an individual admiring a role model and copying the behaviour they display. • Social learning theory involves paying attention to the role model by taking an interest in their behaviour. • Social learning theory suggests that if a person is rewarded, they are more likely to reproduce the learned behaviour and continue to do it in the future as they feel motivated. • Intrinsic self-reinforcement may occur when the learned behaviour makes the individual feel proud or good about what they have done. A02 • The triplets saw their older sister Brittany as a role model and wanted to imitate her behaviour of putting away the dolls. • Mia had noticed and taken an interest in how her dad put away the toys in the toy cupboard. • Brittany rewarded Mia by saying “well done” when she put her doll into the toy cupboard which externally motivated her to put the rest of her toys away. • Mia smiled when she was told by her older sister that she had done well when she put her doll in the toy cupboard suggesting she was proud with what she had done. 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)

9	AO1 (6 marks), AO3 (6 marks) AO1 • Raine et al. (1997) aimed to see whether murderers had different brain activity to non-murderers • They used PET scans to examine the level of activity in the left and right hemispheres of 41 murderers • Murderers had less activity in their prefrontal and parietal brain regions, more activity in their occipital areas, and no difference in their temporal areas. • Bandura (1961, 1963) investigated the impact of adult role models on children's aggressive behaviour • 72 children (1961 study) observed either same-sex or different sex role models acting aggressively or non-aggressively with a Bobo doll • They found children were more likely to copy same-sex role models and modelled aggressive behaviour • Bandura (1965) looked at the influence of vicarious reinforcement with children watching an aggressive film where the model is punished, rewarded, or given no consequence AO3 • Raine et al. (1997) could be used to match murderer brain activity to others and attempt to prevent future murders • The study used a PET scan in an artificial setting so lacks ecological validity • It has limited generalisability although with such a niche group it is perhaps representative • Bandura (1961, 1963) could provide evidence for prosocial role models in society, e.g. celebrities • Bandura (1965) shows censorship is required on television and video games • Bandura did not examine the potential contribution of genes in predisposing violent behaviour Look for other reasonable marking points.	(12)
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Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–3 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) A judgement/decision may be presented, but will be generic and the supporting evidence will be limited. Limited attempt to address the question. (AO3)
Level 2	4–6 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 judgement/decision being presented. Candidates will demonstrate a grasp of competing arguments but response may be imbalanced. (AO3)
Level 3	7–9 Marks	Demonstrates accurate knowledge and understanding. (AO1) Displays a mostly developed and logical argument, containing mostly coherent chains of reasoning. Demonstrates an awareness of competing arguments, presenting a judgement/decision which may be balanced. (AO3)
Level 4	10–12 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical argument, containing logical chains of reasoning throughout. Demonstrates an awareness of competing arguments and presents a balanced response, leading to an effective nuanced and balanced judgement/decision. (AO3)

Question Number	Answer	Mark
7	AO1 (1 mark), AO3 (1 mark) One mark for identification of a strength of systematic desensitisation as a treatment for phobias (AO1) One mark for justification of the strength (AO3) For example: One strength is that systematic desensitisation has been shown to be an effective therapy in the reduction of fear responses (1) as supported by Capafóns et al (1998), who found that 90% of participants reported a reduction in their fear of flying (1). Look for other reasonable marking points.	(2)

6	AO2 (4 marks) Up to four marks for description of one alternative treatment for Matilda's phobia. For example, flooding: • Matilda's could undertake flooding for her phobia of buttons which involves exposing her directly to her phobia (1). Matilda would be placed in a room filled with buttons with no way of getting out (1). At the beginning Matilda will be in a state of extreme anxiety (1). As Matilda's panic subsides she will come to realise that there is no threat from the buttons resulting in her fear being extinguished (1). Look for other reasonable marking points. Answers must relate to the scenario. Generic answers score 0 marks.	(4)
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7	AO1 (4 marks), AO3 (4 marks) AO1 • SD involves client being introduced to the phobic object whilst inducing a relaxation response • The client is given relaxation training through hypnosis / drugs / muscle control • A hierarchy of anxiety provoking situations is drawn up between therapist and client • Client moves through each stage of the hierarchy replacing anxiety with relaxation AO3 • Studies investigating the effectiveness of systematic desensitisation, e.g. ◦ Capafóns et al. (1998): phobia of flying ◦ Iglesias et al. (2013): driving phobia ◦ Lang et al. (1963): snake phobia ◦ McGlynn et al. (1999): in vivo snake phobia • Marks (1975) concluded that systematic desensitization with relaxation is no more effective than graded exposure so proposed 'exposure therapy' as a replacement • In vivo exposure therapy is typically more effective than in vitro, relaxation, imaginal, and cognitive therapy (e.g. Wolitzky-Taylor et al., 2008) • SD lacks validity to real life situations although the use of virtual reality (VR) or hypnosis-guided SD (HGSD) can be used Look for other reasonable marking points.	(8)
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Level	Mark	Descriptor
Candidates must demonstrate an equal emphasis between knowledge and understanding vs evaluation / conclusion in their answer.		
	0	No rewardable material.
Level 1	1-2 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) A conclusion may be presented, but will be generic and the supporting evidence will be limited. Limited attempt to address the question. (AO3)
Level 2	3-4 Marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a superficial conclusion being made. (AO3)
Level 3	5-6 Marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning leading to a conclusion being presented. Candidates will demonstrate a grasp of competing arguments but evaluation may be imbalanced. (AO3)
Level 4	7-8 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical evaluation, containing logical chains of reasoning throughout. Demonstrates an awareness of competing arguments, presenting a balanced conclusion. (AO3)

SECTION C

Question Number	Indicative content	Mark
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8(a)**A02 (4 marks)****(4)**

		Observed	Expected	O-E	(O-E) ²	(O-E) ² /E
20-35 years	Patients with 'less severe' symptoms after treatment	5	8	-3	9	1.125
	Patients with 'more severe' symptoms after treatment	15	12	3	9	0.75
40-55 years	Patients with 'less severe' symptoms after treatment	11	8	3	9	1.125
	Patients with 'more severe' symptoms after treatment	9	12	-3	9	0.75
				Chi-Squared =	3.75	

One mark for accurate completion of O-E.
 One mark for accurate completion of (O-E)² column.
 One mark for accurate completion of (O-E)²/E column.
 One mark for correct answer 3.75

Look for other reasonable marking points.



Question Number	Answer	Mark
8(b)	A02 (1 marks), A03 (1 marks) One mark for identification of strength (A02). One mark for justification of strength (A03). For example: Bertie used a standardised rating scale from 1-10 to measure the phobic symptoms, which can be tested for reliability (1) because the measurement of severity of symptoms could be replicated with all patients to assess consistency over time (1). Look for other reasonable marking points. Answers must relate to the scenario. Generic answers score 0 marks.	(2)

Question Number	Answer	Mark
8(c)	A02 (1 mark), A03 (1 mark) One mark for identification of improvement (A02). One mark for justification of improvement (A03). For example: Bertie could improve his study by getting family members to record patients' phobic behaviours (1) which would provide a more accurate measure of the patients' severity of symptoms after treatment as they are more likely to be objective (1). Look for other reasonable marking points. Answers must relate to the scenario. Generic answers score 0 marks.	(2)

14	AO1 (4 marks), AO2 (4 marks) AO1 • Systematic desensitisation begins with a client and therapist undertaking a functional analysis, where the triggers of the phobia are discussed before any intervention takes place. • The therapist will teach the client relaxation techniques, such as breathing skills, muscle relaxation and calming the heart rate. • A client and therapist would construct a fear hierarchy that ranks the fear stimuli from least fearful to most fearful. • The therapist will gradually expose the client to each level of the hierarchy where the client will use the relaxation techniques when presented with the feared stimulus. AO2 • Astrid would explain her fear of flying and the impact it has on her life choices, such as how it prevents her from travelling abroad. • Astrid would use the relaxation strategies when being exposed to her fear stimulus of flying during her therapy and can continue to use these on the flight to her friend's wedding. • The hierarchy may start with images of a plane, followed by video clips, getting on a plane that does not move, a simulator and then an actual flight. • Astrid would use breathing and relaxation when watching a video of a flight until she was calm and able to watch the video without a fear response being triggered, then move on to the next level. Look for other reasonable marking points.	(8)
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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)

Section E - Issues and Debates

Question Number	Indicative Content	Mark
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Question Number	Indicative Content	Mark
8	A01 (4 marks), A03 (4 marks) A01 - Flooding involves a person being placed in a situation where their object of fear is present for a prolonged period. - The body physically reacts to the phobic situation with increased heart rate and blood pressure which after a short while should become regular again. - Flooding can be either in vivo which is exposure to the actual phobic object or in vitro which is exposure to an imagined phobic object. - The phobic sufferer has no means to remove themselves from this situation and through continuous exposure their anxiety level eventually decreases. A03 - Wolpe (1973) used the therapy with a girl who was afraid of cars, taking her on a drive for several hours until she calmed down, showing flooding is effective in treating phobias. - A concern of flooding is the ethical and moral issue of treating a phobia by putting a client purposely in a fearful, frightening situation which can be very distressing. - Flooding can show a more immediate change in the reduction of phobic symptoms compared to other forms of therapy, such as cognitive behavioural therapy, which could take numerous sessions to get to the same outcome. - Exposure to the feared stimuli is more gradual in systematic desensitisation where the client has greater control over exposure, so may be seen as a more ethical way to treat a phobia. Look for other reasonable marking points.	(8)

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

11	AO1 (4 marks), AO2 (4 marks) AO1 • Classical conditioning suggests a phobia is acquired through the pairing of a neutral stimulus with an unconditioned stimulus. • The unconditioned response becomes associated with the neutral stimulus, resulting in a conditioned response each time the conditioned stimulus is presented. • Negative reinforcement maintains a phobia when a behaviour or action results in the removal of an undesired consequence. • When a desired consequence is received for a behaviour or action, the behaviour is reinforced positively, so the phobic response is maintained. AO2 • The clown toy in the box was an unconditioned stimulus that resulted in an unconditioned fear and startle response, the action of opening a box would have been a neutral stimulus for Dora. • When Dora's UCR of fear and startle was paired with the NS of opening the box an association developed between opening the box and fear, creating a conditioned response of fear to boxes. • By opening all the boxes for her, Dora's family are negatively reinforcing the fear by removing her undesired consequence of having to open boxes when they are delivered so Dora's phobia of boxes is maintained. • By consoling Dora and bringing her cups of tea, her family are providing positive reinforcement for her behaviour of showing fear of boxes, which is desired by Dora so she will continue the phobic response of being afraid of boxes. Look for other reasonable marking points.	(8)
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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)

Issues and Debates

Question Number	Indicative Content	Mark
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Question Number	Answer	Mark
5 (a)	AO2 (4 marks) Up to four marks for description of classical conditioning in relation to Winston's phobia of flying. For example: The turbulence on the aeroplane produces an unconditioned fear response (1) to the naturally occurring unconditioned stimulus of the storm (1). This has been paired with the neutral stimulus of the aeroplane (1), creating a conditioned stimulus of the aeroplane being associated with a conditioned response of fear (1). Look for other reasonable marking points. Answers must relate to the scenario. Generic answers score 0 marks.	(4)

Question Number	Answer	Mark
5 (b)	AO1 (2 marks), AO3 (2 marks) One mark for identification of each weakness (AO1). One mark for justification of each weakness (AO3). For example: Weakness one - Classical conditioning is an incomplete explanation of learning as it can only explain behaviour resulting from a conditioned stimulus-response (1) whereas social learning theory would suggest that learning behaviour involves observing and imitating others and not through a conditioned stimulus-response (1). Weakness two - Classical conditioning suggests that behaviour can only be determined by the environment directly influencing our behavioural outcomes which is reductionist (1) and does not consider that human personalities can be unique in that they have the potential for free will in directing how they behave in different situations (1). Look for other reasonable marking points.	(4)

14	AO1 (4 marks), AO3 (4 marks) AO1 • The therapist first carries out a functional analysis to determine what triggers the phobic response to the stimulus and how this is impacting on the client. • The client then makes a hierarchy of fears where they will rank the phobic stimuli from the least fear inducing situation, such as a photograph, to the most fear inducing, such as holding the object. • The therapist teaches the client relaxation techniques, such as deep breathing exercises and control of muscle tension, that they will use when exposed to the stimulus. • The client is then presented with the lowest fear inducing stage in the hierarchy of fear and utilises the relaxation techniques while exposed to the stimuli, which can be in-vitro (imaginary) or in-vivo (actual phobic stimuli). AO3 • The therapy may be more ethical than other therapies as the client has their own input into designing the hierarchy of fear and the steps they take during the treatment, so they may feel ownership over their therapy which limits dropping out of treatment. • Capafons et al. (1998) found that that systematic desensitisation is effective is reducing the fear of flying, so the treatment may work with specific phobias. • Psychoanalysis would argue that this does not tackle the cause of a phobia if the fear is for unconscious reasons that are projected onto an object or situation, so relaxation may just tackle physical responses to stimuli but not the underlying reasons for a phobia. • Toozandehjani (2011) found that after treatment for a social phobia, neither systematic desensitisation nor assertiveness training had lasted the 3 months, so effectiveness may only be short term. Look for other reasonable marking points.	(8)
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Level	Mark	Descriptor
AO1 (4 marks), AO3 (4 marks) Candidates must demonstrate an equal emphasis between knowledge and understanding vs assessment/conclusion in their answer		
	0	No rewardable material.
Level 1	1–2 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) Generic assertions may be presented. Limited attempt to address the question. (AO3)
Level 2	3–4 Marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a generic or superficial assessment being presented. (AO3)
Level 3	5–6 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 may be imbalanced. (AO3)
Level 4	7–8 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical assessment, containing logical chains of reasoning throughout. Demonstrates an awareness of the significance of competing arguments/factors leading to a balanced judgement being presented. (AO3)

Issues and Debates

Question Number	Indicative Content	Mark
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12	AO1 (2 marks), AO3 (2 marks) One mark for identification of each practical issue (AO1) One mark for justification/exemplification of each practical issue (AO3) For example: • Rats are more practical to use than humans, as their gestational period is very short (1). This will help to investigate characteristics across generations which is harder using humans (1). • Environmental factors can be better controlled when using animals in research than humans (1). This would make studies more internally valid as extraneous variables should not impact on research (1). Look for other reasonable marking points.	(4)
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Question Number	Answer	Mark
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Question Number	Answer	Mark
6(a)	AO1 (1 mark) One mark for stating the aim of contemporary study. For example: Becker et al. (2002) - Aimed to investigate the impact of exposure to Western attitudes through the introduction of media on the eating behaviours of adolescent girls (1). Bastian et al. (2011) - Aimed to investigate if playing a violent game would cause a dehumanised view of their self and the other players (1). Capafóns et al. (1998) - Aimed to investigate if systematic desensitisation was effective as a treatment for those afraid to fly (1). Look for other reasonable marking points.	(1)



Question Number	Answer	Mark
6(b)	AO1 (2 marks) Up to two marks for describing the results of contemporary study. For example: Becker et al. (2002) - EAT-26 score had more than doubled, from 12.7% in 1995 to 29.2% in 1998 (1). The part of the sample that used self-induced vomiting as a means of weight control increased from 0% in 1995 to 11.3% in 1998 (1). Bastian et al. (2011) - Participants in both games found them as equally frustrating, Mortal Kombat mean of 3.27 compared to 3.04 for Top Spin tennis (1). In study one, results for the mean score for self-humanity were lower in the violent game, 3.74 compared to non-violent game of 4.35 (1). Capafóns et al. (1998) - All measures decreased, except for palm temperature before and after treatment for the treatment group (1). 90% of patients in the treatment group showed a reduction in their symptoms, only 2 did not (1). Look for other reasonable marking points.	(2)

Question Number	Answer	Mark
6(c)	AO1 (2 marks), AO3 (2 marks) One mark for identification of each strength/weakness (AO1). One mark for justification of each strength/weakness (AO3). For example: Becker et al. (2002) Strength - Becker et al. (2002) used a standardised questionnaire called the EAT-26 to measure eating behaviour (1) which had already been established and used in research therefore is a reliable measure of eating behaviour (1). Weakness - Becker et al. (2002) only used participants from Fiji, which is not representative of all cultures (1) as in Fijian culture robust body shapes are deemed attractive, which may not be representative of other cultures (1). Bastian et al. (2011) Strength - Bastian et al. (2011) used a standardised procedure of controlling the same equipment ,i.e. TV screen X-box video game console used by all participants (1) therefore ensuring that it was the video game that influenced the results and not other variables such as length of time the game was played for (1). Weakness - Bastian et al.'s (2011) sample across both studies showed higher numbers of women so there may be gender bias – gynocentric (1) which may reduce the representativeness of results for a typical computer gaming population (1). Capafóns et al. (1998) Strength - Capafóns et al. (1998) used standardised testing including the Fear of Flying Scale and physiological measurements, i.e. heart rate of the participants (1) these were established and valid measures of the phobic participants' anxiety before and after the treatment (1). Weakness - In the Capafóns et al. (1998) study participants were exposed to their phobia through watching a videotape of a plane trip, which is low in validity (1) as it may not reflect their true anxiety levels when taking a plane trip in a real-life setting (1). Look for other reasonable marking points.	(4)

5(a)	AO2 (2 marks) One mark for stating each of the IV and DV. No credit for one word variables (e.g. 'fixed') • IV: Different amounts of food (variable ratio) or Specific amounts of food (fixed ratio) • DV: Time taken (in seconds) to complete the maze	(2)
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Question Number	Answer	Mark
5(b)	AO1 (1 mark), AO2 (1 mark) One mark for describing a relevant ethical issue (AO1). One mark for application of relevant ethical issue to Zaid's study (AO2) For example: • One ethical issue to consider is that the animals have appropriate care and accommodation (1). Zaid would have to ensure that the rats have sufficient food, cage size and freedom of movement during his study (1). Look for other reasonable marking points.	(2)

Question Number	Answer	Mark
5(c)	AO1 (2 marks), AO3 (2 marks) One mark for each relevant weakness identified (AO1). One mark for justification of each relevant weakness (AO3) For example: • One weakness of using animals is that they have a different genotype to humans (1). Rats have a different number of chromosomes than humans so the generalisability of the findings will be limited (1). • One weakness of using animals is that studies take place in artificial surroundings for the animal (1). This may change the behaviour of the rats so the results lack validity (1). Look for other reasonable marking points.	(4)

Question Number	Answer	Mark

10 (a)	AO2 (2 marks) One mark for each statement in relation to the scenario. For example: • Zoë would have used the minimum number of squirrels and mice needed for her to achieve accurate results (1). • She would have had to ensure that the squirrels and mice were accommodated in appropriate cages (1). Look for other reasonable marking points. Answers must relate to the scenario. Generic answers score 0 marks.	(2)
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Question Number	Answer	Mark
10 (b)	AO2 (2 marks) One mark for a partially operationalised directional (one-tailed) experimental hypothesis Two marks for a fully operationalised directional (one-tailed) experimental hypothesis For example: • The mice will complete the maze quicker than the squirrels (1) • The mice will take less time in seconds to complete the maze than the squirrels will take to complete the maze (2). Look for other reasonable marking points. Answers must relate to the scenario. Generic answers score 0 marks.	(2)

Question Number	Answer	Mark
10 (c)	AO2 (1 mark), AO3 (1 mark) One mark for identification of a strength in terms of reliability in relation to scenario (AO2) One mark for justification of the strength (AO3) For example: The maze is the same for each animal so using positive reinforcement is the only variable affecting the time it takes to complete the maze (1). The results would not be skewed by differences in the complexity of the maze, giving Zoë reliable findings about operant conditioning (1). Look for other reasonable marking points. Answers must relate to the scenario. Generic answers score 0 marks.	(2)

Question Number	Answer	Mark
10 (d)	AO2 (1 mark), AO3 (1 mark) One mark for identification of an improvement in terms of validity in relation to scenario (AO2) One mark for justification of the improvement (AO3) For example: The squirrels and mice could be trained to complete a more real-life behaviour such as finding their way between two points in a woodland area of trees (1), which would improve the validity of the findings about the effectiveness of positive reinforcement in conditioning animal behaviour as their behaviour would be more natural (1). Look for other reasonable marking points. Answers must relate to the scenario. Generic answers score 0 marks.	(2)

Question Number	Indicative Content	Mark
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13	AO2 (3 marks) One mark for each point describing an observation in the supermarket. For example: A standardised list of behaviours that demonstrate the helping behaviours could be used (1). A participant observation would be used which involves the researcher asking for help to reach the top shelf (1). Helping and not helping behaviour in the supermarket could be recorded using a tally chart (1). Look for other reasonable marking points. Answers must relate to the scenario. Generic answers score 0 marks.	(3)
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Question Number	Indicative content	Mark
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7	A02 (3 marks) Up to three marks for description of the procedure used for their practical investigation. For example: • I selected a bus route from my college that was used regularly by students at our college (1). I positioned myself on a seat on the third row of a bus so I could see and hear passenger interactions with the bus driver (1). I tallied the number of times passengers said 'thank you' or not to the bus driver (1). Look for other reasonable marking points. Answers must relate to their practical investigation. Generic answers score 0 marks.	(3)
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9**A02 (3 marks)****(3)**

Up to **three** marks for a description of how Bradley could use a content analysis.

For example:

- Bradley would decide on the categories of violent and non-violent behaviours he would be looking for in the television programmes (1). He would then watch a range of children's television programmes and code the violent and non-violent behaviour he sees (1) which he would tally to see which television programmes contained the most violence (1).

Look for other reasonable marking points.

Answers must relate to the scenario.

Generic answers score 0 marks.



10	AO2 (2 marks), AO3 (2 marks) One mark for identification of a strength and a weakness in relation to the scenario (AO2). One mark for justification of the strength and the weakness (AO3). For example: Strength - There is evidence that behaviour shaping is a successful way to help young children learn appropriate behaviours through reinforcing the boy to take the small steps of sitting on a chair with Marigold, eventually sitting at his desk (1). Nasa et al. (2008) found that behaviour shaping was successful in supporting a child aged 11 years old with ADHD to concentrate on tasks, so Marigold is likely to achieve success with the child in her class (1). Weakness - Shaping the behaviour of a 9-year-old child to comply with the desired expected behaviour that Marigold determines to be appropriate in her classroom could be considered ethically and morally unacceptable (1) as it is only a manipulation of surface behaviour, so Marigold is just attempting to control his actions which could be considered a form of social control (1). Look for other reasonable marking points. Generic answers score 0 marks. Answers must relate to the scenario.	(4)
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Question Number	Indicative Content	Mark
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8(a)	A02 (1 mark) One mark for identification of the type of observation used by Theresa. For example: Covert observation of observing the children from out of sight (1). Look for other reasonable marking points.	(1)
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Question Number	Answer	Mark
8(b)	A02 (2 marks), A03 (2 marks) One mark for identification of each strength/weakness in relation to the scenario (A02). One mark for justification of each strength/weakness (A03). For example: Strength - Teresa positioned herself out of sight of the children entering the beach as a covert observer to avoid demand characteristics (1) as her presence beside the different coloured beach sets may have caused the children to select differently or not at all therefore reducing the validity of the results (1). Weakness - One weakness of Teresa's study is that there may be extraneous variables such as the children being colour blind that she could not control (1) resulting in reduced reliability as some children may not select because of colour preference but pick the beach set that is nearest to them (1). Look for other reasonable marking points. Answers must relate to the scenario. Generic answers score 0 marks.	(4)

13(a)

AO2 (4 marks)

(4)

One mark for accurate completion of O-E column.
One mark for accurate completion of (O-E)² column.
One mark for accurate completion of (O-E)²/E column.
One mark for correct answer to two decimal places **4.61**

		Observed	Expected	O-E	(O-E) ²	(O-E) ² /E
Large car	Below the speed limit	10	13.57	-3.57	12.74	0.94
	Above the speed limit	12	8.43	3.57	12.74	1.51
Small car	Below the speed limit	19	15.43	3.57	12.74	0.83
	Above the speed limit	6	9.57	-3.57	12.74	1.33
				Chi-squared =	4.61	

Look for other reasonable marking points.

Question Number	Answer	Mark
13(b)	AO2 (1 mark) One mark for a correct determination of significance. For example: The calculated value (4.61) is more than the critical value (3.84), so the results are significant (1). Look for other reasonable marking points.	(1)

Question Number	Indicative Content	Mark
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7(a)	AO1 (4 marks) Up to four marks for correct description of content analysis. For example: Content analysis is a research technique used to examine different media sources (1). It will involve changing qualitative data (e.g. magazine article) into quantitative data (1). The researcher creates categories beforehand to measure the common themes of the content (1). Researchers tally and analyse their findings to uncover themes within the sources (1). Look for other reasonable marking points.	(4)
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Question Number	Answer	Mark
7(b)	AO1 (1 mark), AO3 (1 mark) One mark for identification of weakness (AO1). One mark for justification of weakness (AO3). For example: The content analysis may be subjective due to different interpretations (1), as researchers may tally the qualitative data based on their own opinions (1). Look for other reasonable marking points.	(2)

4(a)	AO1 (1 mark) One mark for a factor stated. For example: A study that produces quantitative data that can be analysed is scientific. (1) Look for other reasonable marking points.	(1)
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Question Number	Answer	Mark
4(b)	AO2 (2 marks), AO3 (2 marks) One mark for each suitable application of Pavlov's study (AO2). One mark for each suitable justification of scientific status of Pavlov's study (AO3). For example: The dogs' response to the metronome/footsteps was measured in a controlled, artificial setting (1) to minimise situational variables which increases internal validity which is scientific (1). Pavlov's study could be easily replicated with other dogs to see if salivation can be classically conditioned (1), which is scientific as the findings can be tested for reliability to see if there is consistency in the results (1). No credit for points not directly linked to Pavlov's study. Look for other reasonable marking points.	(4)



Question Number	Answer	Mark
4(c)	AO2 (1 mark), AO3 (1 mark) One mark for relevant application of Pavlov's study (AO2). One mark for justification of relevant improvement (AO3). For example: • Pavlov's study could be improved by using humans instead of dogs (1). Using humans would make the findings more generalisable to other humans as they share more similar genes and environment (1). Look for other reasonable marking points.	(2)



Question Number	Answer	Mark
11(a)	AO2 (3 marks) One mark for appropriate title One mark for appropriate labelling of axes One mark for correct plots in two bars For example: A bar chart to show the total number of sporty behaviours for males and females in children's television programmes Number of sporty behaviours recorded Gender Male Female 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 0	(3)
Look for other reasonable marking points.		

Question Number	Answer	Mark
11b	AO2 (1 mark), AO3 (1 mark) One mark for identification of an appropriate conclusion (AO2) One mark for justification of the conclusion (AO3) For example: Mandeep and Priya could conclude that stereotypes of male and female characteristics were reinforced in both television programmes (1), which is shown by males being presented as more sporty, less emotional and stronger than females (1). Look for other reasonable marking points. Answers must relate to the scenario. Generic answers score 0 marks.	(2)

Question Number	Answer	Mark
11c	AO2 (1 mark), AO3 (1 mark) One mark for identification of a methodological issue (AO2) One mark for justification of the methodological issue (AO3) For example; Mandeep and Priya only investigated two children's programmes which may be of the same genre (1) which means the findings of their investigation can only be generalised to the two programmes chosen and not all children's television programmes (1). Look for other reasonable marking points. Answers must relate to the scenario. Generic answers score 0 marks.	(2)

13(a)	AO2 (3 marks) Up to three marks for a description of the procedure for the learning theories practical investigation. For example: In pairs we stood at the front of college, one person tallied the gender of the driver of each car that went past the college (1) and one person recorded the time taken to drive between two fixed points for each car (1). We took detailed notes about the environment, such as traffic or pedestrians that could affect the speed of the drivers (1). Look for other reasonable marking points. Answers must relate to the practical investigation for learning theories. Generic answers score 0 marks.	(3)
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Question Number	Answer	Mark
13(b)	AO2 (2 marks), AO3 (2 marks) One mark for each identification of an improvement in relation to the practical investigation (AO2). One mark for justification of each improvement (AO3). For example: - We could have completed a pilot study to check whether the vantage points we used would allow us to see the driver clearly (1), which would have ensured we were all recording the gender of the car drivers accurately and reliably (1). - We should have repeated the observation at different times of the day and on several different days of the week (1) to gather a more representative sample of the target population of road users (1). Look for other reasonable marking points. Answers must relate to the practical investigation for learning theories. Generic answers score 0 marks.	(4)

Question Number	Indicative Content	Mark
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9 (a)	AO2 (2 marks) Up to two marks for a description of informed consent in relation to the scenario. For example: Archie may have asked the parents of the children if they would allow their child to be observed on a specified day during activities at the pre-school (1). He would have told parents that he aimed to observe play with gender stereotypical toys and explained his observation process (1). Look for other reasonable marking points. Generic answers score 0 marks. Answers must relate to the scenario.	(2)
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Question Number	Answer	Mark																																	
9 (b)	AO2 (4 marks) One mark for accurate completion of O-E column. One mark for accurate completion of (O-E)² column. One mark for accurate completion of (O-E)²/E column. One mark for correct answer to two decimal places 0.24 <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">Boys</td><td>Stereotypical boys' toy</td><td>8</td><td>8.78</td><td>-0.78</td><td>0.61</td><td>0.07</td></tr><tr><td>Stereotypical girls' toy</td><td>12</td><td>11.22</td><td>0.78</td><td>0.61</td><td>0.05</td></tr><tr><td rowspan="2">Girls</td><td>Stereotypical boys' toy</td><td>10</td><td>9.22</td><td>0.78</td><td>0.61</td><td>0.07</td></tr><tr><td>Stereotypical girls' toy</td><td>11</td><td>11.78</td><td>-0.78</td><td>0.61</td><td>0.05</td></tr></table> Chi squared = 0.24			Observed	Expected	O-E	(O-E) ²	(O-E) ² /E	Boys	Stereotypical boys' toy	8	8.78	-0.78	0.61	0.07	Stereotypical girls' toy	12	11.22	0.78	0.61	0.05	Girls	Stereotypical boys' toy	10	9.22	0.78	0.61	0.07	Stereotypical girls' toy	11	11.78	-0.78	0.61	0.05	(4)
			Observed	Expected	O-E	(O-E) ²	(O-E) ² /E																												
	Boys	Stereotypical boys' toy	8	8.78	-0.78	0.61	0.07																												
		Stereotypical girls' toy	12	11.22	0.78	0.61	0.05																												
	Girls	Stereotypical boys' toy	10	9.22	0.78	0.61	0.07																												
Stereotypical girls' toy		11	11.78	-0.78	0.61	0.05																													

Question Number	Answer	Mark
9 (c)	A02 (1 mark) One mark for determining whether there is a significant difference. For example: • There is not a significant difference between the choice of gender stereotypical toys by boys and girls as the calculated value (0.24) is lower than the critical value (2.71) for a one-tailed test at $p=0.05$ (1). Look for other reasonable marking points.	(1)

Question Number	Answer	Mark
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14	AO1 (7 MARKS), AO2 (7 MARKS) For example: Key question: Is the influence of role models and celebrities something that causes anorexia? AO1 • Anorexia is diagnosed when BMI falls below 17.5 • Anorexia costs the NHS money to treat the disorder so trying to prevent anorexia would save money. • Ana Carolina Reston was a model who died from anorexia and could have learned this from her role models • Symptoms of anorexia could lead to sufferers not working and this affects society as a whole. AO2 • Advertisers use classical conditioning to associate thinness/fashion with fame and popularity which encourages weight loss and reduced BMI. • Operant conditioning suggests if someone is complimented on initial weight loss they would continue losing weight and this makes them ill. • Celebrities and models are used to advertise products such as fashionable clothing so individuals will observe and imitate these role models. • The link between celebrities and anorexia is purely correlational and there are other factors involved in the disorder that may be why they cannot work. Look for other reasonable marking points.	(8)
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Level	Mark	Descriptor
AO1 (4 marks), AO2 (4 marks) Candidates must demonstrate an equal emphasis between knowledge and understanding vs application in their answer.		
Level 0	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)

SECTION E ISSUES AND DEBATES

Question Number	Indicative content	Mark
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13	AO1 (4 marks), AO3 (4 marks) AO1 • Observations can be non-participant where the researcher is not involved in the group being observed. • When the researcher infiltrates the group to observe their behaviour it is a participant observation. • Structured observations are when a researcher observes individuals in an environment that has been manipulated. • A covert observation can be used to investigate behaviour without the participant knowing they are being watched. AO3 • Non-participant observations are useful as you would be able to concentrate on recording the behaviour being displayed. • Participant observations allow the researcher to gain a more valid insight into the reasons behind the behaviour being observed which are useful for practical application. • Structured observations are less useful as there is low validity in the human behaviour seen due to the artificially constructed in the setting. • Covert observations could be seen as unethical under the BPS code of ethics as participants cannot give prior informed consent but are useful for observing natural behaviour. Look for other reasonable marking points.	(8)
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Level	Mark	Descriptor
AO1 (4 marks), AO3 (4 marks) Candidates must demonstrate an equal emphasis between knowledge and understanding vs evaluation/conclusion in their answer.		
	0	No rewardable material.
Level 1	1-2 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) A conclusion may be presented, but will be generic and the supporting evidence will be limited. Limited attempt to address the question. (AO3)
Level 2	3-4 Marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a superficial conclusion being made. (AO3)
Level 3	5-6 Marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning leading to a conclusion being presented. Candidates will demonstrate a grasp of competing arguments but evaluation may be imbalanced. (AO3)
Level 4	7-8 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical evaluation, containing logical chains of reasoning throughout. Demonstrates an awareness of competing arguments, presenting a balanced conclusion. (AO3)



SECTION E
ISSUES AND DEBATES

Question Number	Indicative content	Mark
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Question Number	Indicative content	Mark
7	AO1 (4 marks), AO2 (4 marks) For example: Key Question: Is anorexia nervosa caused by nurture factors? AO1 • Anorexia nervosa is classified as an intense fear of being over weight or becoming fat. • Anorexia nervosa treatment costs the NHS money so if we understand how it is caused then we can aim to put in place intervention to save money. • In 2006, it was reported that the female model Luizel Ramos died of a heart attack brought on by her anorexia whilst participating in Fashion Week in Montevideo, Uruguay. • Anorexia has long term implications for a sufferers such as disruption to menstrual cycle, tiredness and physical pain. AO2 • Operant conditioning suggests that anorexic role models and celebrities are reinforced through the positive coverage in magazines they get for the way they look therefore increasing their anorexic behaviour. • Secondary reinforcers could be offered as part of a token economy programme to encourage patients to follow healthy eating habits. • Bandura's research can explain the impact Ramos has in that we are influenced by role models who are the same gender as us, so young girls might be influenced by the anorexic behaviour of female models like Ramos. • The psychodynamic explanation for anorexia nervosa would suggest that it is a reaction to a fixation from an early developmental stage that prevents the child from growing up such as disruption to menstrual cycle through not eating. 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)

13(a)	AO2 (2 marks) Up to two marks for a description of tallying in relation to the scenario. For example: Mischa would have decided on predefined categories of food that he considered to be healthy, such as salad, and unhealthy, such as chips (1) and he would have then recorded every time he saw each type of food being purchased by a customer at the local café (1). Look for other reasonable marking points. Answers must relate to the scenario. Generic answers score 0 marks.	(2)
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Question Number	Answer	Mark
13(b)	AO2 (2 marks) Up to two marks for a description of the sampling technique in relation to the scenario. For example: Mischa used an opportunity sampling technique to gather his sample of participants buying healthy or unhealthy food (1), as he recorded the food choices of the customers that happened to be visiting the café on the day he was there (1). Look for other reasonable marking points. Answers must relate to the scenario. Generic answers score 0 marks.	(2)

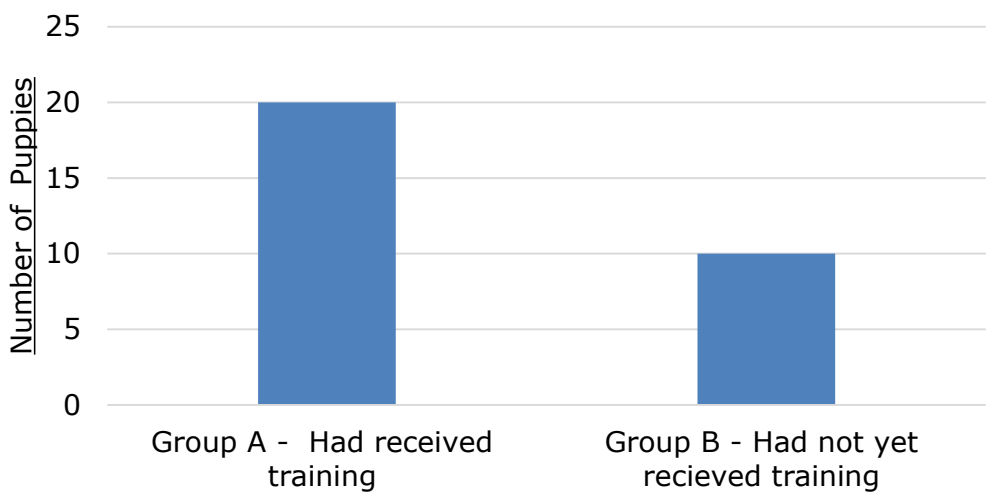
Question Number	Answer	Mark
13(c)	A02 (2 marks), A03 (2 marks) One mark for each identification of an improvement in relation to the investigation (A02) One mark for justification of each improvement (A03) For example: • Mischa could have used different cafes from different locations than just his local café (1) so that the results of the healthy food choice study would have been more representative of the wider population beyond the local town, increasing generalisability (1). • Mischa could gather qualitative data from his observation by noting down further details of the purchases, such as cost of food item (1). This would increase the validity of the findings to provide further insight into the reasons behind the healthy and unhealthy food choices made by customers (1). Look for other reasonable marking points. Answers must relate to the scenario. Generic answers score 0 marks.	(4)

Question Number	Answer	Mark
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6(a)	AO2 (2 marks) Up to two marks for the aim of their practical investigation. For example: • The aim was to see whether gender affected obedience (1). • The aim was to see if more males or females turned off their mobile phones when asked to by a teacher (2). Look for other reasonable marking points. Answers must relate to their practical investigation. Generic answers score 0 marks.	(2)
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Question Number	Answer	Mark
6(b)	AO2 (3 marks) Up to three marks for a description of the results of their quantitative data analysis for their practical investigation. For example: • 'Male disobey' was the highest number with 13 tally marks, whereas 'female disobey' was the lowest with 3 tallies (1). The calculated value of my Chi Squared test was 3.12 for a one-tailed test at $p=0.05$ (1). This was greater than the critical value of 2.71 so I rejected my null hypothesis and found a difference between males and females in obedience (1). Look for other reasonable marking points. Answers must relate to their practical investigation. Generic answers score 0 marks.	(3)

Question Number	Answer	Mark
6(c)	AO2 (2 marks), AO3 (2 marks) One mark for each strength identified up to a maximum of two marks (AO2). One mark for justification of each strength up to a maximum of two marks (AO3). For example: • One strength was that students were observed using their phones in their natural setting of the college (1). This meant that they are likely to act normally to the command to put their phone away so the study has higher ecological validity (1). • A second strength was that watching student's make a decision whether or not to put their phone away was easily replicable (1). This means I could easily repeat my observation of male/female obedience regarding putting their phone away on another day so can test for reliability (1). Look for other reasonable marking points. Answers must relate to their practical investigation. Generic answers score 0 marks.	(4)

Number								
6(a)	A02 (3 marks) One mark for correct/appropriate title (see graph below for suitable example) One mark for correct/appropriate labelling of axes (see graph below for suitable example) One mark for correct plots of data points (see graph below for correct plotting) A bar chart showing the number of puppies who would sit on command from those that had received the training (Group A) and those that had not yet received the training (Group B) <table><thead><tr><th>Puppy Group</th><th>Number of Puppies</th></tr></thead><tbody><tr><td>Group A - Had received training</td><td>20</td></tr><tr><td>Group B - Had not yet recieved training</td><td>10</td></tr></tbody></table>	Puppy Group	Number of Puppies	Group A - Had received training	20	Group B - Had not yet recieved training	10	(3)
Puppy Group	Number of Puppies							
Group A - Had received training	20							
Group B - Had not yet recieved training	10							
	Look for other reasonable marking points.							

Question Number	Answer	Mark																																								
6(b)	AO2 (4 marks) <table><tr><td></td><td></td><td>Observed</td><td>Expected</td><td>O-E</td><td>(O-E)²</td><td>(O-E)²/E</td></tr><tr><td rowspan="2">Group A: Puppies that had received the training</td><td>Puppies who sat on command.</td><td>20</td><td>15</td><td>5</td><td>25</td><td>1.67</td></tr><tr><td>Puppies who did not sit on command.</td><td>5</td><td>10</td><td>-5</td><td>25</td><td>2.5</td></tr><tr><td rowspan="2">Group B: Puppies that had not yet received the training</td><td>Puppies who sat on command.</td><td>10</td><td>15</td><td>-5</td><td>25</td><td>1.67</td></tr><tr><td>Puppies who did not sit on command.</td><td>15</td><td>10</td><td>5</td><td>25</td><td>2.5</td></tr><tr><td colspan="6">Chi-Squared =</td><td>8.34</td></tr></table> One mark for accurate completion of O-E. One mark for accurate completion of (O-E)² column. One mark for accurate completion of (O-E)²/E column. One mark for correct answer 8.34 Look for other reasonable marking points.			Observed	Expected	O-E	(O-E) ²	(O-E) ² /E	Group A: Puppies that had received the training	Puppies who sat on command.	20	15	5	25	1.67	Puppies who did not sit on command.	5	10	-5	25	2.5	Group B: Puppies that had not yet received the training	Puppies who sat on command.	10	15	-5	25	1.67	Puppies who did not sit on command.	15	10	5	25	2.5	Chi-Squared =						8.34	(4)
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Question Number	Answer	Mark
6(c)	A02 (1 mark), A03 (1 mark) One mark for identification of a strength of using quantitative data (A02). One mark for justification of the strength (A03). For example: • One strength of the quantitative data used by Claire in her investigation about the dog training programme is that it provided objective, numerical data (1) which would reduce biased information from which Claire could analyse and reliably conclude its effectiveness as a dog training programme (1). Look for other reasonable marking points. Answers must relate to the scenario. Generic answers score 0 marks.	(2)

4(a)	A02 (2 marks) One mark for a basic hypothesis. Two marks for an operationalised hypothesis. For example: • There will be a significant difference in polite behaviour depending on gender (1). • There will be a significant difference in the number of males or females saying "thank-you" to a bus driver when getting off a bus (2). Look for other reasonable marking points. Answers must relate to their practical investigation. Generic answers score 0 marks.	(2)
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Question Number	Answer	Mark
4 (b)	A02 (2 marks) Up to two marks for a description of how quantitative data was gathered in their practical investigation. For example: • I gathered quantitative data by counting the number of times male and female participants did or did not say thank you to a bus driver (1). I then recorded the scores onto my structured observation table and tallied the final totals of male and female responses (1). Look for other reasonable marking points. Answers must relate to their practical investigation. Generic answers score 0 marks.	(2)

Question Number	Answer	Mark
4 (c)	AO2 (1 mark), AO3 (1mark) One mark for identification of a conclusion in their practical investigation (AO2). One mark for justification of the conclusion (AO3). For example: We concluded that men were less polite than females when observed saying “thank you” or not to a bus driver (1) which was supported by a total of 3 tallied scores for men observed showing polite behaviour compared to a higher number of 13 tallied scores for females (1). Look for other reasonable marking points. Answers must relate to their practical investigation. Generic answers score 0 marks.	(2)

Question Number	Answer	Mark
4(d)	AO2 (2 marks), AO3 (2 marks) One mark for identification of each weakness of their practical investigation (AO2). One mark for justification of each weakness of their practical investigation (AO3). For example: - One weakness is that I only used the words “thank you” to record the bus passengers’ politeness to the bus driver (1) which may have resulted in other ways of being polite to the bus driver being missed leading to subjective results (1). - One weakness is that other passengers on the bus talking and getting on and off the bus were not controlled for (1) which may have resulted in missing them saying “thank you” therefore getting invalid results on polite behaviour (1) Look for other reasonable marking points. Answers must relate to their practical investigation. Generic answers score 0 marks.	(4)

Question Number	Answer	Mark
6 (a)	A02 (4 marks) Up to four marks for description of the quantitative and qualitative results of their practical investigation in learning theories. For example: When totalling my tally chart, I found that women were on average 3 times as helpful as males (1). The mean number of times men were helpful was 2.2 compared to 6.6 helpful actions observed women doing (1). From our thematic analysis we found that the most helpful physical behaviour shown by both genders was "door opening" (1). In addition, "thank you" was the most common polite verbal comment made by both males and females when someone opened the door for them (1). Look for other reasonable marking points. Answers must relate to their learning practical investigation. Generic answers score 0 marks.	(4)

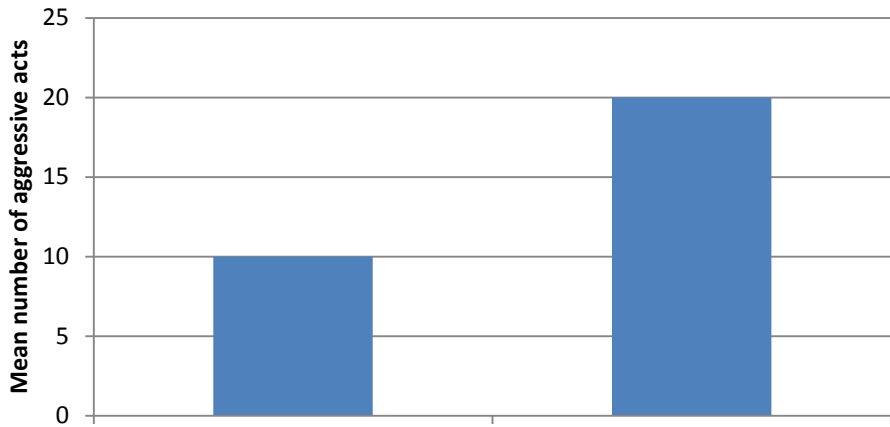
Question Number	Answer	Mark
6(b)	A02 (1 mark), A03 (1 mark) One mark for an identification of a weakness of their practical investigation (A02). One mark for justification of the weakness (A03). For example: • One weakness is that I used opportunity sampling and only gathered students who were in the canteen at morning break which lacks generalisability (1) because not all students would have been in the canteen so my results about helpfulness are not representative of all students in the school (1). Look for other reasonable marking points. Answers must relate to their learning practical investigation. Generic answers score 0 marks.	(2)

Question Number	Answer	Mark
6(c)	A02 (2 marks), A03 (2 marks) One mark for identification of each strength in relation to their practical investigation (A02). One mark for justification of each strength (A03). For example: Strength one - Four of us watched the helpful behaviour of other students in our school canteen at lunch time which has ecological validity (1) as the students were in a realistic setting and so were more likely to behave naturally in performing helpful acts (1). Strength two - Our observations measured different helpful acts such as saying, "thank you" and opening doors which are valid acts the students would do on a daily basis (1) therefore ensuring that the acts being measured have face validity as they are realistic of the normal helpful behaviour that students would do when in the canteen (1). Look for other reasonable marking points. Answers must relate to their learning practical investigation. Generic answers score 0 marks.	(4)

5(a)	AO1 (3 marks) Up to three marks for description of a non-participant observation as a human research method. For example: Non-participant observations are where the researcher is not part of the group being observed (1). The researcher would count the number of behaviours from afar so as to not influence participant actions (1). The researcher may write down qualitative descriptions of participant responses without being a participant themselves (1). Look for other reasonable marking points.	(3)
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Question Number	Answer	Mark
5(b)	AO2 (2 marks) Up to two marks for relevant description of event sampling used by Malcolm in his non-participant observation at the local nursery. For example: Malcolm will decide beforehand what types of aggressive behaviour he will observe at the local nursery, such as hitting (1). During the observation Malcolm will record the aggressive behaviour, such as every time a child hits another child (1). Look for other reasonable marking points. Answers must relate to the scenario. Generic answers score 0 marks.	(2)

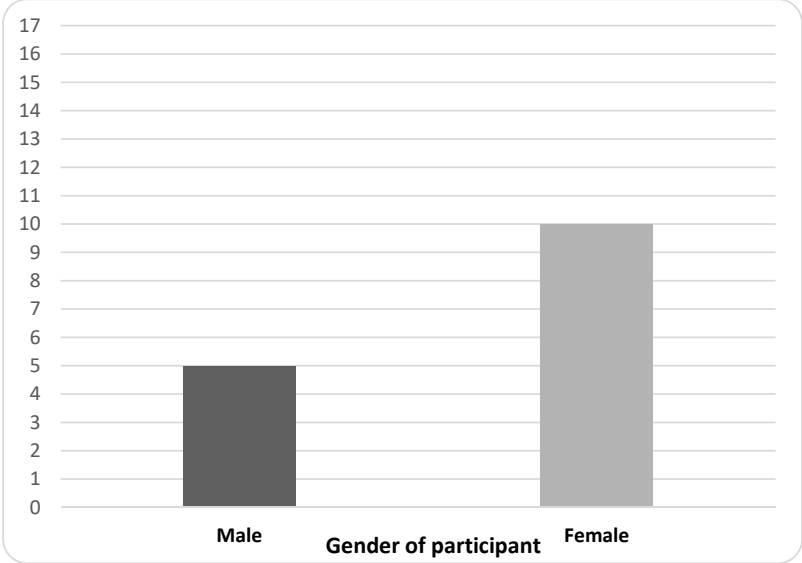
Question Number	Answer	Mark
5(c)	AO2 (1 mark) One mark for accurate median score for aggressive acts observed for children aged one to two-years old. For example: • 9 Reject all other answers.	(1)

Question Number	Answer	Mark						
5(d)	AO2 (3 marks) One mark for correct/appropriate title (see graph below for suitable example) One mark for correct/appropriate labelling of axes (see graph below for suitable example) One mark for correct plots of data points (see graph below for correct plotting) Bar graph showing mean score for aggressive acts in children aged one to two-years (Group A) and three to four-years old (Group B) <table><thead><tr><th>Age of children</th><th>Mean number of aggressive acts</th></tr></thead><tbody><tr><td>Children aged one to two years old</td><td>10</td></tr><tr><td>Children aged three to four years old</td><td>20</td></tr></tbody></table>	Age of children	Mean number of aggressive acts	Children aged one to two years old	10	Children aged three to four years old	20	(3)
Age of children	Mean number of aggressive acts							
Children aged one to two years old	10							
Children aged three to four years old	20							

Question Number	Answer	Mark
5(e)	AO2 (1 mark), AO3 (1 mark) One mark for relevant participant variable identified (AO2). One mark for justification of how the participant variable could have affected the results (AO3). For example: Malcolm's could have identified the gender of the children prior to the observation (1) which could have biased the results if one group only had boys (1). Look for other reasonable marking points. Answers must relate to the scenario. Generic answers score 0 marks.	(2)

Question Number	Answer	Mark

Question Number	Answer	Mark
9(a)	AO2 (1 mark) One mark for identification of the observation type. For example: Covert observation. Look for other reasonable marking points.	(1)

Question Number	Answer	Mark
9(b)	AO2 (3 marks) One mark for correct/appropriate title (see graph below for a suitable example) One mark for correct/appropriate labelling of axes (see graph below for a suitable example) One mark for correct plots of data points (see graph below for correct plotting) A bar chart to show the number of males and females who watched a horror film in a local cinema  Look for other reasonable marking points.	(3)

Question Number	Answer						Mark																																								
9(c)	AO2 (4 marks) One mark for accurate completion of O-E column. One mark for accurate completion of (O-E)² column. One mark for accurate completion of (O-E)²/E column. One mark for correct answer 2.98 to two decimal places. <table><tr><td></td><td></td><td>Observed</td><td>Expected</td><td>O-E</td><td>(O-E)²</td><td>(O-E)² /E</td></tr><tr><td rowspan="2">Males</td><td>Comedy Films</td><td>12</td><td>9.5</td><td>2.5</td><td>6.25</td><td>0.66</td></tr><tr><td>Horror Films</td><td>5</td><td>7.5</td><td>-2.5</td><td>6.25</td><td>0.83</td></tr><tr><td rowspan="2">Females</td><td>Comedy Films</td><td>7</td><td>9.5</td><td>-2.5</td><td>6.25</td><td>0.66</td></tr><tr><td>Horror Films</td><td>10</td><td>7.5</td><td>2.5</td><td>6.25</td><td>0.83</td></tr><tr><td colspan="4"></td><td>Chi-squared =</td><td colspan="2">2.98</td></tr></table> Look for other reasonable marking points.								Observed	Expected	O-E	(O-E) ²	(O-E) ² /E	Males	Comedy Films	12	9.5	2.5	6.25	0.66	Horror Films	5	7.5	-2.5	6.25	0.83	Females	Comedy Films	7	9.5	-2.5	6.25	0.66	Horror Films	10	7.5	2.5	6.25	0.83					Chi-squared =	2.98		(4)
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Question Number	Answer	Mark
9(d)	AO2 (1 mark) One mark for accurate determination of a significant difference. For example: There is no significant difference between male and female film choice because the calculated value (2.98) is less than the critical value (3.84) for a two-tailed test at $p=0.05$ (1). Look for other reasonable marking points.	(1)

Question Number	Answer	Mark
9(e)	A02 (1 mark), A03 (1 mark) One mark for identification of a weakness in relation to the scenario (A02) One mark for justification of the weakness (A03) For example: Collecting quantitative data about film choice at the cinema may lack validity in terms of why someone went to see that film (1). This is because Malik will not know the underlying reasons why the participants chose to see a horror or comedy film so cannot be sure it was their personal choice to pick the type of film (1). Look for other reasonable marking points. Answers must relate to the scenario. Generic answers score 0 marks.	(2)

Question Number	Indicative content	Mark
8	AO1 (4 marks), AO2 (4 marks), AO3 (4 marks) AO1 • “Survival of the fittest” means that an organism that is suited to its environment is more likely to survive and reproduce. • Evolution is the impact of how inherited characteristics change throughout generations to aid survival. • Operant conditioning refers to processes of learning through consequences which can involve positive rewards being offered. • Operant conditioning also involves being punished by providing a negative stimulus so unacceptable behaviour is likely to stop. AO2 • To avoid endangering their survival 32 of the visitor’s immediately paid attention to the “Danger – footpath closed” sign and followed the alternative safer footpath. • Six visitors, after putting themselves in danger, by attempting to walk on the dangerous footpath were asked to leave the park. • 32 visitors read and followed the instructions given to follow a safer footpath which resulted in a reward at the end. • Six visitors ignored the danger sign and therefore were given a punishment by being asked to leave the park. AO3 • Evolutionary theory is reductionist as it does not consider situational factors such as imitation in explaining human behaviour as found in research suggested by social learning theory. • Kettlewell (1952-1972) suggested support for inherited traits in peppered moths who had evolved to survive in their environment by developing the trait of camouflage to avoid detection from danger. • Skinner (1948) found that if pigeons were positively reinforced with a food reward, they would be more likely to repeat a behaviour, giving operant conditioning credibility as a theory.	(12)

	• Operant conditioning is not the only explanation for learning, classical conditioning suggests people also learn through an association between stimulus and response suggesting operant conditioning cannot explain all behaviour. Look for other reasonable marking points.	
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