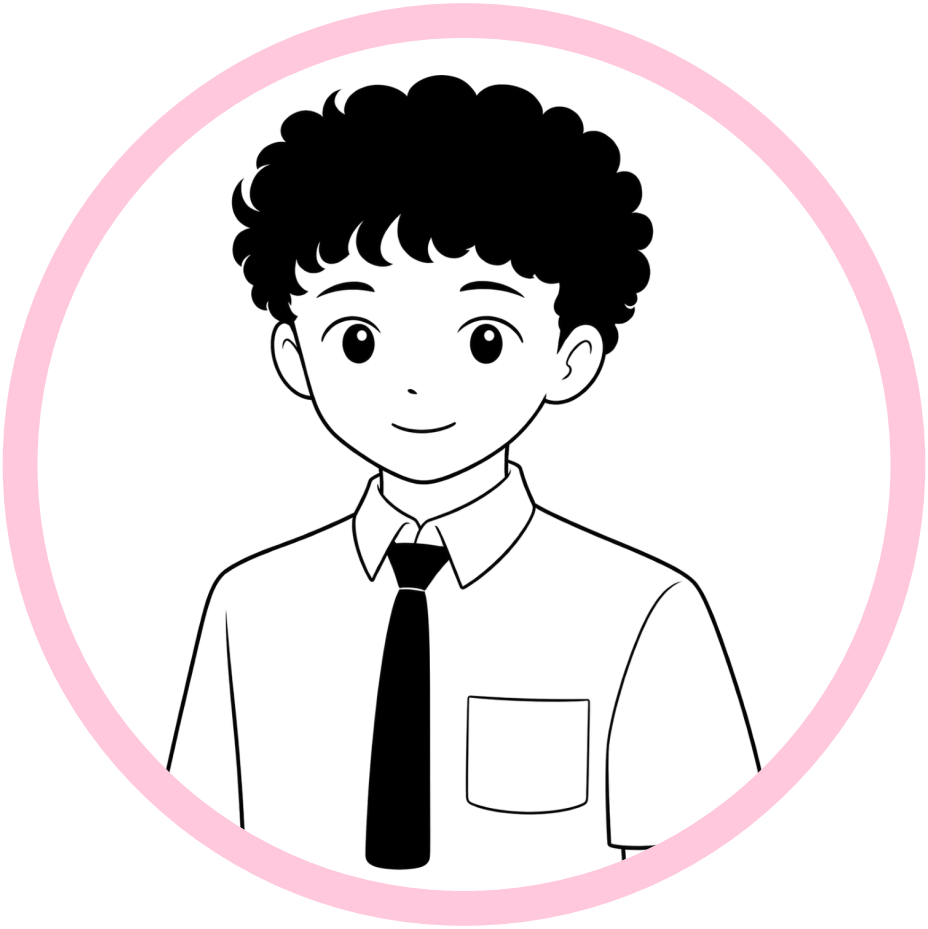
PEARSON EDEXCEL IAL PSYCHOLOGY · YPS01

PSYCHOLOGY



EXAM QUESTION PACK

COGNITIVE PSYCHOLOGY

SCORE	PERCENTAGE
/242	%

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Q1.

In your studies of cognitive psychology, you will have learned about features of working memory, including the episodic buffer.

(a) State **two** features of the episodic buffer.

(2)

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(b) Explain **two** weaknesses of the working memory model proposed by Baddeley and Hitch (1974).

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(Total for question = 6 marks)

Q2.

Jaya is a waitress at a restaurant. A customer gave a verbal order to Jaya for some food. At the same time the restaurant manager was speaking to another customer nearby. Jaya could overhear the conversation. When Jaya reached the kitchen to order the food, she could not remember everything the customer had asked for.

(a) Describe, using the phonological loop, why Jaya could not remember everything the customer had asked for.

(2)

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(b) Explain **one** strength and **one** weakness of using the working memory model (Baddeley and Hitch, 1974) to explain why Jaya could not remember everything the customer had asked for.

(4)

Strength

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Weakness

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(Total for question = 6 marks)

Q3.

In your studies of cognitive psychology, you will have learned about reconstructive memory (Bartlett, 1932), including schema theory.

(a) Describe what is meant by the term 'schema'.

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(b) Explain **one** strength of reconstructive memory (Bartlett, 1932) as an explanation of memory.

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(Total for question = 4 marks)

Q4.

Bobby and Chris witnessed a car theft outside a supermarket. Bobby called the police while Chris went to tell the security guard. Chris also spoke to two other shoppers who had seen the car being stolen. The police interviewed Bobby and Chris about the theft.

Bobby recalled that the car was dark blue, the two thieves were male with dark hair, and both were wearing dark clothing. He told the police that one thief was quite tall, and the other was much smaller.

Chris recalled that the car was black, and he believed one of the thieves was female. He said they were both wearing light blue jeans and grey jumpers. He told the police that the thief who drove the car away was much taller than the female thief.

(a) Describe, using schema theory, why Bobby may have recalled that both car thieves were male, and were wearing dark clothing.

(2)

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(b) Explain, using reconstructive memory (Bartlett, 1932), **two** reasons why Chris has different memories of the car theft.

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(Total for question = 6 marks)

Q5.

In your studies of cognitive psychology, you will have learned about the multi-store model of memory (Atkinson and Shiffrin, 1968).

(a) Describe **one** store from the multi-store model of memory (Atkinson and Shiffrin,1968).

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(b) Explain **one** strength of the multi-store model (Atkinson and Shiffrin,1968) as an explanation of memory.

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(Total for question = 4 marks)

Q6.

When revising for a test, Andrei prefers to listen to music. His teacher insists that Andrei's class revise for their test in silence.

(a) Describe, using the working memory model (Baddeley and Hitch, 1974), why the teacher insists Andrei's class revise in silence.

(2)

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(b) Explain, using the working memory model (Baddeley and Hitch, 1974), **one** strength and **one** weakness of Andrei's class revising in silence.

(4)

Strength

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Weakness

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(Total for question = 6 marks)

Q7.

In your studies of cognitive psychology, you will have learned about the working memory model (Baddeley and Hitch, 1974).

(a) Describe what is meant by the 'visuo-spatial sketchpad' in relation to the working memory model.

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(b) Explain **one** weakness of the working memory model (Baddeley and Hitch, 1974) as an explanation of memory.

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(Total for question = 4 marks)

Q8.

Korie was watching a television programme whilst tidying his kitchen. During an interesting part of this programme, Korie did not notice an open cupboard door in his kitchen. Korie walked into the open cupboard door and banged his head.

(a) Describe, using the visualâ€‘spatial sketchpad, why Korie did not notice the open cupboard door.

(2)

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(b) Explain **two** weaknesses of using the working memory model (Baddeley and Hitch, 1974) to explain why Korie did not notice the open cupboard door.

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(Total for question = 6 marks)

Q9.

Eliza is a teaching assistant who has been asked to help Darius learn a map of a city for a geography test.

Eliza intends to use her understanding of the working memory model (Baddeley and Hitch, 1974) to plan activities to help Darius learn the map.

(a) Describe, using the phonological loop, how Eliza can help Darius learn the map of the city.

(2)

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(b) Describe, using the visuo-spatial sketchpad, how Eliza can help Darius learn the map of the city.

(2)

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(Total for question = 4 marks)

Q10.

In your studies of cognitive psychology, you will have conducted a practical investigation.

(a) Describe **one** ethical consideration you made in your practical investigation in cognitive psychology.

(2)

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(b) Describe why you used a Wilcoxon signed ranks test to analyse the data gathered in your practical investigation in cognitive psychology.

(2)

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(c) Explain **two** improvements you could have made to your practical investigation in cognitive psychology.

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(Total for question = 8 marks)

Q11.

Assess the usefulness of case studies of brain-damaged patients to research memory in cognitive psychology.

(8)

(Total for question = 8 marks)

Q12.

Assess the usefulness of the case study of Henry Molaison (HM) in relation to research into memory.

(8)

(Total for question = 8 marks)

Q13.

Mateus wanted to investigate encoding in short-term memory. He decided to conduct a pilot study before his full investigation. Eight friends agreed to be participants. The participants took part in two conditions.

- Condition A: the participants listened to a list of 10 words that sounded different, for example: cat, bus, sow.
- Condition B: the participants then listened to a list of 10 words that sounded similar, for example: sat, hat, mat.

Once all 10 words had been read to the participants, they immediately wrote down as many of the words as they could recall.

Mateus recorded the number of correctly recalled words for each condition. The results are shown in **Table 1**.

Participant	Condition A Words that sound different	Condition B Words that sound similar
A	5	3
B	8	3
C	7	4
D	9	3
E	7	5
F	6	3
G	7	2
H	5	3

Table 1

(a) Calculate the mean score for correctly recalled words in **Condition A**. You must give your answer to **two** decimal places.

(1)

Space for calculations

Mean .....

(b) Calculate the median score for correctly recalled words in **Condition B**.

(1)

Space for calculations

Median .....

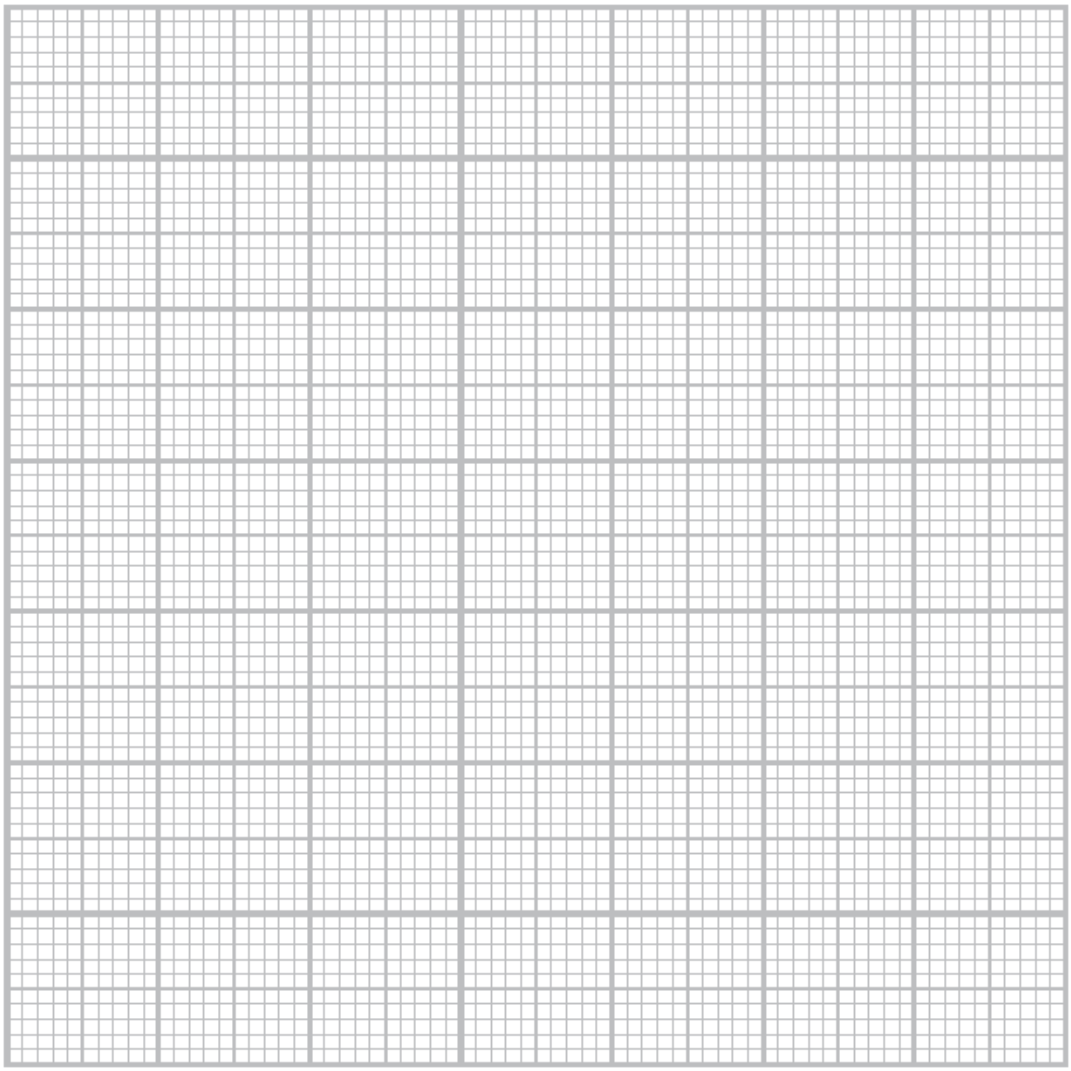
(c) Mateus calculated that the mode for Condition A was **seven**, and the mode for Condition B was **three**.

Draw a bar chart to represent the mode scores calculated by Mateus for his investigation.

(3)

Title: .....

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(d) Following his pilot study, Mateus decides to complete his full investigation. He would like to gather a sample of participants that represents people of different ages, genders and cognitive abilities.

Describe how Mateus could use a volunteer sampling technique to gather participants for his investigation.

(3)

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(Total for question = 8 marks)

Q14.

Kim wanted to test the impact of interference on short-term memory recall. She gathered a sample of eight participants to take part in her experiment.

- Condition A: participants were first shown 10 trigrams and asked to recall as many as they could immediately.
- Condition B: participants were then shown 10 different trigrams and asked to recall as many as they could after a 20-second interference task.

Kim recorded the number of trigrams recalled correctly.

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

Participant	Condition A Number of trigrams recalled correctly with immediate recall	Condition B Number of trigrams recalled correctly with an interference task of 20 seconds
A	9	4
B	9	2
C	8	3
D	9	2
E	7	1
F	3	4
G	7	3
H	8	2

Table 1

(a) Calculate the mean score for the number of trigrams recalled correctly in **Condition A**. You **must** give your answer to **one** decimal place.

(1)

Space for calculations

Mean .....

(b) Calculate the median score for the number of trigrams recalled correctly in **Condition B**.

(1)

Space for calculations

Median .....

(c) Complete **Table 2** and calculate the Wilcoxon Signed Ranks test for Kim's data.

You can use the formulae and statistical tables.

You **must** show your calculations.

(4)

Participant	Condition A Number of trigrams recalled correctly with immediate recall	Condition B Number of trigrams recalled correctly with an interference task of 20 seconds	Difference	Ranked difference
A	9	4		
B	9	2		
C	8	3		
D	9	2		
E	7	1		
F	3	4		
G	7	3		
H	8	2		

Table 2

Space for calculations

T value .....

(d) Give **two** reasons why Kim would have used a Wilcoxon Signed Ranks test for the data she

gathered in her experiment.

(2)

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2 .....

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(Total for question = 8 marks)

Q15.

Katy wanted to investigate how many new pictures children could identify after one hour and again after two weeks. Katy used different age groups and had 10 children in each age group.

Katy showed them 20 pictures one at a time. She told each child what the picture was and the child repeated the name. Katy tested each group after one hour (Condition A) and then after two weeks (Condition B) to see if they could recall the name of the picture.

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

Age (years)	Condition A: Mean number of pictures that were recalled correctly out of 20 after one hour	Condition B: Mean number of pictures that were recalled correctly out of 20 after two weeks
4	6	2
5	6	3
6	7	4
7	9	6
8	11	9

Table 1

(a) Calculate the percentage of correctly recalled pictures out of 20 by eight-year-olds, after one

hour.

(1)

Space for calculations

Percentage .....

(b) Calculate the ratio for the mean number of correctly recalled pictures after one hour and after two weeks for seven-year-olds.

You **must** give the ratio in its lowest form.

(1)

Space for calculations

Ratio .....

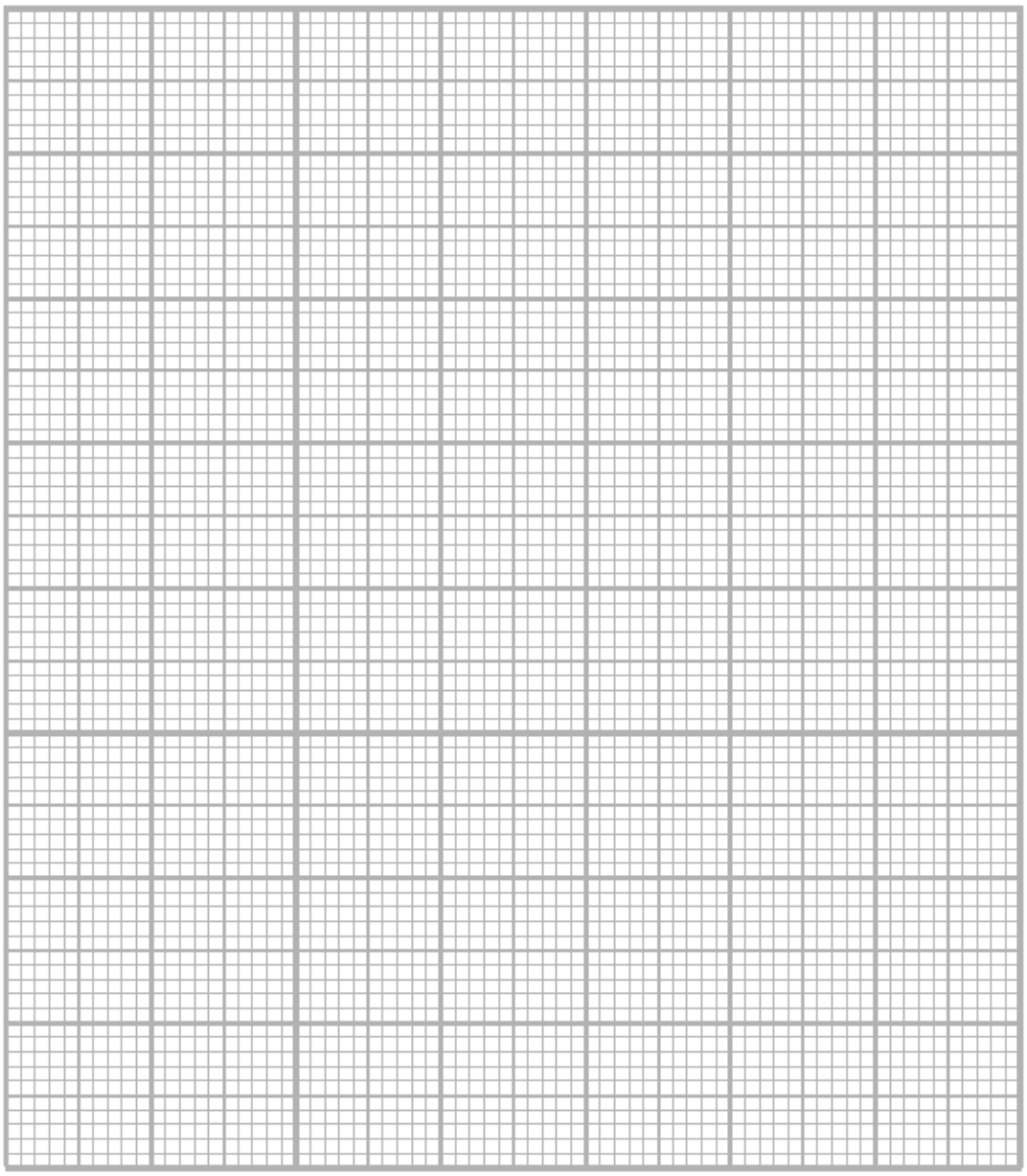
(c) Draw a bar chart to show the mean number of correctly recalled pictures out of 20 after one hour and the mean number of correctly recalled pictures out of 20 after two weeks for the five-year-olds.

(3)

Title

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(d) Katy decided that she would like to extend her study to look at three-year-old children as well.

Describe how Katy could obtain a random sample of three-year-old children for her investigation.

(3)

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(Total for question = 8 marks)

Q16.

Max wanted to test whether the accuracy of recall of an original stimulus would decrease after additional information was provided.

Max gathered eight participants and gave each participant a photograph of a busy city street.

- Condition A: after looking at the photograph for 15 minutes, each participant was asked to write down as much as they could recall about the photograph.
- Condition B: the same participants were then shown a 5-minute video clip of the same city street. Each participant was then asked to write down as much as they could recall about the original photograph.

Max recorded the number of details that were recalled correctly.

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

Participant	Condition A Number of details that were recalled correctly	Condition B Number of details that were recalled correctly
A	26	20
B	14	15
C	28	21
D	19	9
E	21	21
F	26	13
G	20	14
H	24	25

Table 1

(a) Calculate the mode for the number of details that were recalled correctly in **Condition A**.

(1)

Space for calculations

Mode .....

(b) Calculate the range for the number of details that were recalled correctly in **Condition B**.

(1)

Space for calculations

Range .....

(c) Complete**Table 2** and calculate the Wilcoxon Signed Ranks test for Max's data.

You can use the formulae and statistical tables.

You **must** show your calculations.

(4)

Participant	Condition A Number of details that were recalled correctly	Condition B Number of details that were recalled correctly	Difference	Ranked difference
A	26	20		
B	14	15		
C	28	21		
D	19	9		
E	21	21		
F	26	13		
G	20	14		
H	24	25		

Table 2

Space for calculations

T value .....

(Total for question = 6 marks)

Q17.

Lev investigated the capacity of short−term memory. He conducted an experiment with six participants. Lev showed participants an image containing 20 common objects, such as a pen, cup and lamp. Lev recorded the number of objects correctly recalled by each participant.

(a) Calculate the standard deviation for the data gathered by Lev by completing **Table 1**.

The formulae and statistical tables can be found in the resources of this paper.

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

(3)

	Number of correctly recalled objects	$(x - \bar{x})$	$(x - \bar{x})^2$
A	10	0.5	0.25
B	9	−0.5	0.25
C	7	−2.5	6.25
D	11	1.5	2.25
E	12	2.5	6.25
F	8	1.5	2.25
Mean score $\bar{x} = 9.5$		Sum of differences^2 =	
Standard deviation = ...			

Table 1

Space for calculations

(b) Lev replicated his experiment with a different group of six participants to check his results.

He found a mean score of 8.5 correctly recalled objects in his replication, compared to a mean score of 9.5 for his first experiment.

Draw a bar chart to show the mean scores for correctly recalled objects in both of Lev's experiments.

(3)

Title .....

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(c) Describe **one** ethical issue that Lev should have considered in his experiments.

(2)

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(Total for question = 8 marks)

Q18.

Leonardo investigated whether the chunking of information would improve recall of numbers. He presented participants with 10 number sequences that each contained 12 digits.

- **Condition A:** participants were presented with each number sequence as a whole number; for example 254879645235
- **Condition B:** the same participants were presented with each number sequence again, but as chunked numbers; for example 254 879 645 235

Leonardo recorded how many number sequences participants recalled in each condition accurately.

(a) (i) Calculate the T value for the data gathered by Leonardo by completing **Table 2.**

You can use the formulae and statistical tables.

You **must** show your working out.

(4)

Participant	Condition A	Condition B	Difference	Ranked Difference
A	2	5		
B	3	5		
C	4	3		
D	6	7		
E	4	4		
F	5	8		
G	2	5		
H	3	2		

Table 2

Space for calculations

T .....

(ii) Determine, using your answer to (a)(i), whether Leonardo's results are significant at P≤0.05 for a one-tailed (directional) test.

You can use the critical values tables.

(1)

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(b) Explain **two** improvements that Leonardo could make to his investigation.

(4)

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(Total for question = 9 marks)

Q19.

Bashir wants to investigate the duration of short-term memory. He intends to use a field experiment for his investigation.

(a) Describe a task that Bashir could give his participants to test the duration of short-term memory.

(2)

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(b) Explain **two** weaknesses of Bashir using a field experiment to investigate the duration of short-term memory.

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(Total for question = 6 marks)

Q20.

Melanie is planning a laboratory experiment to see whether or not visual interference has an impact on the accuracy of short-term memory recall of word lists. She has gathered a total of 18 participants to take part in her experiment.

(a) Describe how Melanie could use an independent groups design for her experiment.

(3)

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(a) Explain **one** weakness of a laboratory experiment in terms of validity.

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(Total for question = 5 marks)

Q21.

When researchers conduct investigations in cognitive psychology, they may gather different types of data.

(a) Describe the difference between quantitative and qualitative data.

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(b) Describe the difference between primary and secondary data.

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(c) Describe, using an example, what is meant by ordinal data.

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(Total for question = 6 marks)

Q22.

Smaragda has started a new job and needs to learn to use the new computer system. She is struggling to remember the correct icons to click to access different features of the computer system.

Smaragda had read the instruction manual on her first day of work but cannot remember all the instructions that were contained in it. She has taken the instruction manual home to read again. Smaragda has decided to access the work computer system from home while she has the instruction manual.

Discuss how the multi-store model of memory (Atkinson and Shiffrin, 1968) could be used to help Smaragda remember how to use the new computer system.

You must make reference to the context in your answer.

(Total for question = 8 marks)

Q23.

Kiwi and Isla are attending a concert of their favourite rock band, ‘The Vengeful Snakes’. The music is very loud and lots of people are shouting. Both girls sing along to some of the songs with the audience. Isla is distracted from the music when a man is knocked over by the crowd who are dancing.

During a light show at the end of the concert, the band members jump into the audience. Kiwi tries to run to the front to get to the band, but she is blocked by a large group, so she returns to Isla.

As they leave the concert, Isla commented that she could not remember the song that played when the man was knocked over. Kiwi laughed and said she could not even remember the light show. They both remembered which songs they sang.

Discuss, using the multi-store model of memory (Atkinson and Shiffrin, 1968), Kiwi and Isla's memory of the events at the concert.

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

(Total for question = 8 marks)

Q24.

In your studies of cognitive psychology, you will have learned about the following classic study in detail:

- Bartlett (1932) War of the Ghosts

Evaluate Bartlett's (1932) War of the Ghosts study.

(12)

(Total for question = 12 marks)

Q25.

Evaluate how well reconstructive memory (Bartlett, 1932), including schema theory, can explain inaccuracy in human memory.

(12)

(Total for question = 12 marks)

Q26.

Arthur and Benny are brothers. They recently attended a family wedding where they met their uncle who they had not seen for three years. Their uncle was talking about when Arthur and Benny were small children and one of them was hurt when they got in a fight about their toys.

Arthur remembered that Benny had pushed him over and he hurt his arm, but Benny remembered that he had tripped over one of the toys and fell onto Arthur accidentally.

Evaluate how well reconstructive memory (Bartlett, 1932), including schema theory, can explain why Arthur and Benny remember the event differently.

You must make reference to the context in your answer.

(Total for question = 12 marks)

Q27.

Evaluate the multi-store model of memory (Atkinson and Shiffrin, 1968).

(Total for question = 12 marks)

Q28.

Evaluate the multi−store model of memory (Atkinson and Shiffrin, 1968).

(8)

(Total for question = 8 marks)

Q29.

Evaluate the use of experimental methods when investigating human memory.

(Total for question = 8 marks)

Q30.

In your studies of cognitive psychology, you will have learned about experimental research designs, including repeated measures, independent groups and matched pairs designs.

Evaluate the use of experimental research designs when investigating memory.

(Total for question = 8 marks)

Q31.

In your studies of cognitive psychology, you will have learned about one of the following contemporary studies in detail:

- Darling et al. (2007)
- Sacchi et al. (2007).

Evaluate your chosen contemporary study.

Chosen study

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(Total for question = 12 marks)

Q32.

In your studies of cognitive psychology, you will have learned about the multi-store model of memory (Atkinson and Shiffrin, 1968).

(a) Explain **one** strength of the multi-store model of memory as an explanation of memory.

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(b) Explain **one** weakness of the multi-store model of memory as an explanation of memory.

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(Total for question = 4 marks)

Q33.

In your studies of cognitive psychology, you will have learned about the multi-store model of memory (Atkinson and Shiffrin, 1968).

Explain **one** strength and one weakness of the multi-store model of memory.

Strength

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Weakness

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(Total for question = 4 marks)