

Question 1

(31 marks)

- (a) Describe the key difference between sensation and perception. (2 marks)

Greü is invited to an art show and is particularly interested in one piece of art, a square painting of a tall tree in the middle of a field.

- (b) Perceiving a sensation is a six stage process. Complete the table below outlining the **six** stages that Greü experienced when viewing the artwork. (11 marks)

Process	Definition	Application to Greü
	Sensory receptors detect presence of a stimulus	
Transmission	Neural impulses leave sensory organs and travel to the brain	Electrochemical message of light stimulus is sent to the brain
		Greü chooses which parts of the stimuli to pay attention to (e.g. Greü focuses on the art and not the wall)
Organisation		
	Give meaning to sensory stimuli	

Colin attends a cocktail party and is discussing psychology with Mwarga. He is very interested in the conversation until Mwarga starts talking about her dogs. Colin is not interested in dogs and realises the couple next to them are now talking in Farsi. He begins to wonder how long ago their conversation changed from English and no longer hears what Mwarga is saying as he listens to them.

- (c) Using your understanding of the role of attention in memory, name and outline the **two** types of attention Colin experiences. (4 marks)

One: _____

Two: _____

- (d) Using your understanding of the 'Cocktail party effect' and the example of Colin from part (c), describe what element of this scenario demonstrates the 'Cocktail party effect'. (2 marks)

Question 1 (continued)

In order to conduct research to test the cocktail party effect, Cherry had to select participants. Two possible methods of sampling participants include convenience sampling and random sampling.

- (e) Define convenience sampling and random sampling and state **one** strength **or one** limitation for each type of sampling. (4 marks)

Convenience sampling: _____

Strength or limitation (circle which)

Random sampling: _____

Strength or limitation (circle which)

A Year 12 classroom teacher wanted her students to explore the phenomenon of the Cocktail party effect.

The teacher randomly allocated her 26 students into one of two groups. Students in each group were required to listen to two different stories simultaneously, read to them in both their left and right ears.

Group 1 were told to listen only to the story in their left ear. Group 2 were told to listen to the stories they heard in their left and right ears.

After the stories were read, the teacher gave each student a memory recall test to measure the amount of information they retained from the stories they heard.

- (f) (i) Identify the independent variable for this experiment. (1 mark)

- (ii) Propose a directional hypothesis for the teacher's experiment. (4 marks)

- (g) Propose **one** participant related extraneous variable that may affect the results and describe how it could affect the results of the experiment. (3 marks)

Variable: _____

Description: _____

Question 2

(20 marks)

A lot has been learnt about the brain through the study of Henry Molaison (HM).

- (a)
- Identify the type of study performed with patient HM and describe this type of research design.
- (3 marks)

- (b)
- Complete the table below stating **two** strengths and **two** limitations to the type of research design identified in part (a).
- (4 marks)

	Strength	Limitation
One		
Two		

- (c) Explain the findings from the study of patient HM in regards to the role of the hippocampus in the formation of memories. (3 marks)

Until his death, HM consented to participate in a wide range of research studies.

- (d) State **three** pieces of information needed in order for informed consent to be given. (3 marks)

One: _____

Two: _____

Three: _____

- (e) Apply the ethical guideline of 'withdrawal rights' to HM and the studies he participated in. (3 marks)

Question 2 (continued)

Darius is a taxi driver in London who suffers damage to his hippocampus.

- (f) Summarise why damage to Darius’s hippocampus will cause issues in his chosen occupation. (4 marks)

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Question 3

(26 marks)

- (a) Define the terms 'recall', 'recognition' and 're-learning' in the context of memory. (3 marks)

Recall: _____

Recognition: _____

Re-learning: _____

- (b) State **one** similarity between recall, recognition and re-learning in memory. (1 mark)

In an experiment comparing serial, free and cued recall, 30 participants were presented a word list of 20 words. Five minutes after they had finished reading the word list, 10 participants were asked to use serial recall, 10 were asked to use free recall and 10 were asked to use cued recall to try to remember the word list. The table of the raw data can be seen below.

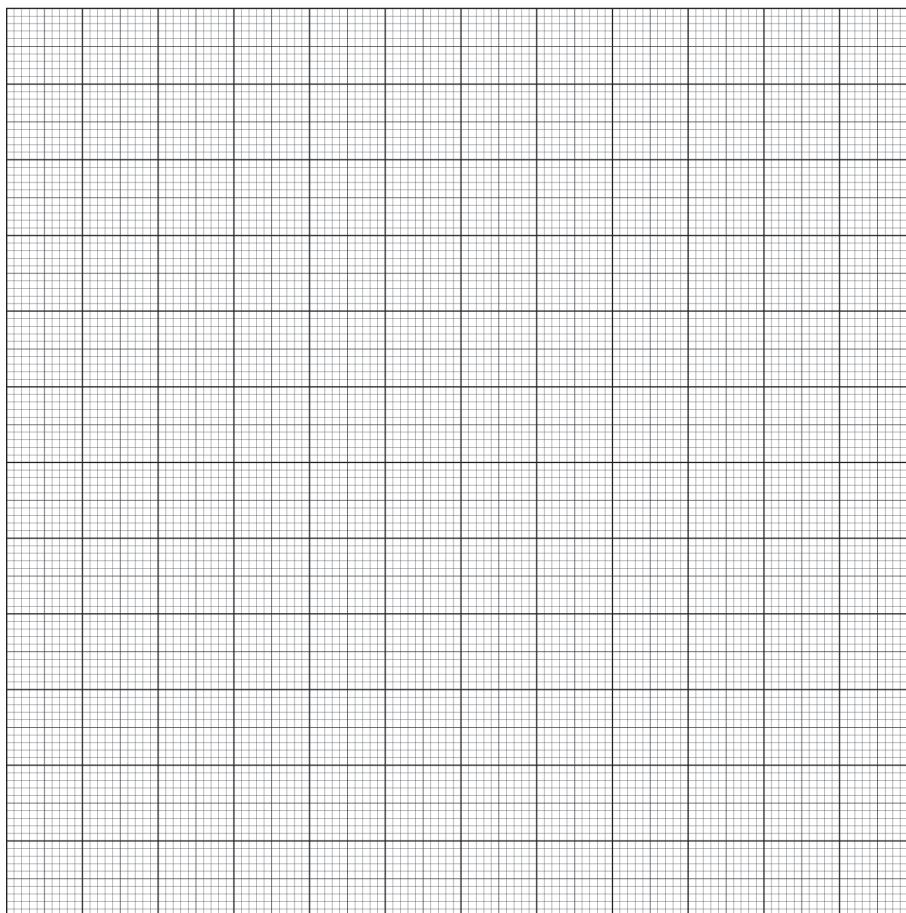
Participant	Number of words recalled		
	Serial recall	Free recall	Cued recall
1	3	9	15
2	5	11	15
3	4	7	15
4	2	14	17
5	6	11	13
6	5	8	15
7	6	9	16
8	3	7	17
9	4	11	14
10	2	3	16
Median			15

- (c) Calculate the median for the serial and free recall groups, record your answers in the table above. (2 marks)

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- (d) State why it can be useful to use the median as a measure of central tendency instead of the mean. (1 mark)

- (e) Construct an appropriate graph using the median scores from the completed table on page 12. (5 marks)



A spare grid is provided at the end of this Question/Answer booklet. If you need to use it, cross out this attempt and indicate that you have redrawn it on the spare page.

Question 3 (continued)

- (f) Using your psychological knowledge and understanding of recall, propose why the cued recall group median is higher than the serial recall group median in the table on page 12. (3 marks)

Craik and Tulving (1975) created a study that aimed to investigate how deep and shallow processing affects memory recall.

- (g) Name and outline the **two** forms of deep processing. (4 marks)

One: _____

Two: _____

- (h) Recall **one** example of a question used in the method for each of the three levels of processing by Craik and Tulving (1975). (3 marks)

Shallow (structural): _____

Shallow (phenomic): _____

Deep: _____

See next page

- (i) Describe **two** limitations or criticisms of Craik and Tulving's (1975) study regarding depth of processing. (4 marks)

One: _____

Two: _____

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Question 4

(17 marks)

Jane was a highly motivated art student who had won several competitions and was proud of her accomplishments. While her family was moving to a new home, Jane lost her valuable art paints. At her new school, she struggled to regain her interest in art. Some days, she did not eat because she would forget to pack her lunchbox and, if she was very hungry, she would jump the school fence to go to the burger shop to buy food. She did not care when she got suspended from school and her parents found it difficult to understand why she was so unmotivated.

- (a) Using the above scenario, identify **two** deficiency needs from Maslow's Hierarchy of Needs (1954), one from before she moved, and one from after she moved, and outline how each effected Jane's motivation. (4 marks)

	Need	How it affected Jane's motivation
Before		
After		

- (b) With reference to the scenario, suggest why Jane began to engage in dangerous activities such as jumping a fence. (2 marks)

Jane has not yet reached self-actualisation.

- (c) Describe what is meant by 'self-actualisation'. (2 marks)

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- (d) List **four** characteristics of a person who has reached self-actualisation according to Maslow (1954). (4 marks)

One: _____

Two: _____

Three: _____

Four: _____

Maslow expanded on the hierarchy of needs in 1970, adding three more needs; cognitive, aesthetic, and transcendence needs.

- (e) Demonstrate the position of cognitive needs in the hierarchy by stating the needs directly above and below it on Maslow's hierarchy. (2 marks)

Above: _____

Below: _____

- (f) Summarise **three** characteristics of an individual who has met their cognitive needs. (3 marks)

One: _____

Two: _____

Three: _____

Question 5

(29 marks)

He et al. (2020) conducted a study looking at the effect of restricting mobile phone use on a number of factors.

- (a) Identify **one** participant variable that was controlled in this study. (1 mark)

To measure mood, He et al. (2020) used the Positive and Negative Affect Schedule (PANAS), which is a 20-item scale for measuring the positive and negative effects of bedtime mobile phone use based on a 5-point Likert scale.

- (b) (i) State whether the data collection method is qualitative or quantitative and provide reasoning for your answer. (2 marks)

- (ii) Outline the difference between subjective and objective data, and state what type of data the PANAS collects. (3 marks)

- (iii) State **one** limitation of using a scale such as the PANAS. (1 mark)

One sleep cycle usually repeats every 90 to 110 minutes.

- (c) (i) State what NREM stands for in the sleep cycle. (1 mark)

- (ii) Complete the table below identifying **four** stages of sleep and their characteristics. (8 marks)

Characteristics at stages of sleep			
Stage	Heart rate	Sleep state	Muscle tension
NREM 1	Normal		
NREM 2	Slowed		Relaxed
NREM 3		Deep sleep	Very relaxed, hard to wake

Question 5 (continued)

Jillian and Habiba are both in Year 12 and are studying Psychology at school. Both feel they are suffering partial sleep deprivation and find the sleep part of the course very interesting. Following their learning, Jillian decides to improve her sleep hygiene while Habiba does not make any changes.

- (d) List **two** psychological and **two** physiological effects both girls may have experienced from partial sleep deprivation. (4 marks)

	Psychological effect	Physiological effect
One		
Two		

- (e) State **three** possible impacts on Habiba if she does not change her sleep behaviour and develops chronic sleep deprivation. (3 marks)

One: _____

Two: _____

Three: _____

- (f) Describe **three** techniques Jillian could utilise to improve her sleep hygiene. (6 marks)

One: _____

Two: _____

Three: _____

End of Section One

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