



**Victorian Certificate of Education
2015**



STUDENT NUMBER

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 Letter

PSYCHOLOGY

Written examination

2015

Reading time: 15 minutes
Writing time: 2 hours 30 minutes

QUESTION AND ANSWER BOOK

Structure of book

<i>Section</i>	<i>Number of questions</i>	<i>Number of questions to be answered</i>	<i>Number of marks</i>
A	65	65	65
B	10	10	60
C	3	3	15
			Total 140

- Students are permitted to bring into the assessment room: pens, pencils, highlighters, erasers, sharpeners and rulers.
- Students are NOT permitted to bring into the examination room: blank sheets of paper and/or white out liquid/tape.
- No calculator is allowed in this examination.

Materials supplied

- Question and answer booklet.
- Answer sheet for multiple-choice questions.
- Additional space is available at the end of the booklet if you need extra paper to complete an answer.

Instructions

- Write your **student number** in the space provided above on this page.
- Check that your **name** and **student number** on your answer sheet for multiple-choice questions are correct.
- All written responses must be in English.

At the end of the examination

- Place the answer sheet for multiple-choice questions inside the front cover of this book.

Students are NOT permitted to bring mobile phones and/or any other unauthorised electronic devices into the examination room.

SECTION A – Multiple-choice questions**Instructions for Section A**

Answer **all** questions in pencil on the answer sheet provided for multiple-choice questions.

Choose the response that is **correct** or that **best answers** the question.

A correct answer scores 1, an incorrect answer score 0.

Marks will not be deducted for incorrect answers.

No marks will be given if more than one answer is completed for any question.

Question 1

According to Craik and Lockhart's Levels of Processing theory, which of the following levels would be least likely to lead to storage of information in memory?

- A. deep encoding
- B. semantic encoding
- C. structural encoding
- D. acoustic encoding

Question 2

Allostatic systems include

- A. the immune system.
- B. the Autonomic Nervous System.
- C. the fight-flight response.
- D. all of the above.

Question 3

Which of the following theories suggests that forgetting is caused by the failure to use, or a lack of, the correct cues to recover information stored in long term memory?

- A. retrieval failure theory
- B. interference theory
- C. motivated forgetting
- D. decay theory

Question 4

When can stimulus discrimination occur in classical conditioning?

- A. when a stimulus similar to the unconditioned stimulus does not result in an unconditioned response
- B. when a stimulus similar to the conditioned stimulus does not result in an unconditioned response
- C. when a stimulus similar to the conditioned stimulus does not result in a conditioned response
- D. when a stimulus similar to the unconditioned stimulus does not result in a conditioned response

Question 5

Which of the following approaches to the classification of mental illnesses would best account for the severity of symptoms a person is experiencing?

- A. the dimensional approach
- B. the cognitive approach
- C. the behavioural approach
- D. the categorical approach

Question 6

Jimmy tries to use bitter-tasting nail polish to condition himself to stop biting his nails. After a few days of nausea-inducing nail biting, Jimmy feels nauseous every time he bites his nails, even when he runs out of bitter-tasting nail polish. A few weeks later, Jimmy begins biting his nails again, which demonstrates the _____ of the conditioned response.

- A. spontaneous recovery
- B. acquisition
- C. stimulus generalisation
- D. extinction

Question 7

Which of the following scenarios would be considered unethical when conducting psychological research?

- A. paying participants for their time
- B. coercing participants to take part in a study
- C. informing participants of their right to discontinue their participation at any time
- D. both A and B

Question 8

An elderly person over 90 years old will likely have

- A. 0-9% of their sleep as REM sleep.
- B. 10-19% of their sleep as REM sleep.
- C. 20-29% of their sleep as REM sleep.
- D. 40-50% of their sleep as REM sleep.

Question 9

Automatic processes

- A. require selective attention.
- B. require divided attention.
- C. disable selective attention.
- D. enable divided attention.

Question 10

Controlled processes

- A. require selective attention.
- B. require divided attention.
- C. disable selective attention.
- D. enable divided attention.

Use the following information to answer Questions 11-13.

Mary has an intact brain whereas Marco has had a split brain surgery to reduce the severity of his epileptic seizures.

Question 11

Mary and Marco are presented a picture of an apple only to their right visual field. Where would this visual information be initially processed for Mary and Marco?

- A. the left hemisphere for both Mary and Marco
- B. the right hemisphere for both Mary and Marco
- C. the left hemisphere for Mary, and the right hemisphere for Marco
- D. the left hemisphere for Mary, and neither hemisphere for Marco

Question 12

Mary has her right eye closed. A picture of an orange is presented briefly, only to her left visual field. She is asked to verbalise what she saw. Which of the following represents how Mary would process this information?

- A. she would not be able to process the visual information
- B. information would be processed initially in the right hemisphere
- C. information would be processed only in the right hemisphere
- D. she would not be able to process the visual information, but could still verbalise what she saw

Question 13

Marco has both eyes open and stares at the middle of a screen. A picture of an orange is presented briefly, only to his left visual field. Which of the following represents how Marco could demonstrate what he saw?

- A. Marco would not be able to verbalise what he saw, but could draw a picture of an orange with his right hand
- B. Marco would not be able to verbalise what he saw, but could draw a picture of an orange with his left hand
- C. Marco could verbalise what he saw, and draw a picture of an orange with his right hand
- D. Marco could verbalise what he saw, and draw a picture of an orange with his left hand

Question 14

In which lobe is visual information primarily processed?

- A. frontal lobe
- B. parietal lobe
- C. occipital lobe
- D. temporal lobe

Use the following information to answer Questions 15-19.

Little Albert had learned to associate a white rat with a loud and scary noise. Although he was not initially afraid of the rat, he was naturally afraid of the loud noise and started to cry. Soon, every time Little Albert saw the rat, he started to cry.

Question 15

In Little Albert's case, what is the unconditioned response?

- A. the rat
- B. the loud and scary noise
- C. crying at the rat
- D. crying at the loud and scary noise

Question 16

In Little Albert's case, what is the conditioned response?

- A. the rat
- B. the loud and scary noise
- C. crying at the rat
- D. crying at the loud and scary noise

Question 17

In Little Albert's case, stimulus generalisation would occur when he responds to _____ in a similar way to the conditioned stimulus.

- A. white rats
- B. other white and furry objects such as a rabbit, but not white rats,
- C. other white and furry objects such as a rabbit
- D. no rats

Question 18

One reason why this study could be considered unethical is because

- A. Little Albert's name was not his real name
- B. there was no attempt to get Little Albert to have stimulus generalisation of the white rat to other white and furry objects
- C. there was an attempt to get Little Albert to have stimulus discrimination between a white rat and other white and furry objects
- D. there was no attempt to extinguish the learned response

Question 19

Which of the following parts of the brain would have the most dominant role in consolidating the emotion of fear with white rats?

- A. hippocampus
- B. amygdala
- C. occipital lobe
- D. frontal lobe

Question 20

How could flooding be used to extinguish a fear of dogs?

- A. repeated exposure of the actual conditioned stimulus (a dog) without the unconditioned stimulus (being bitten) would eventually lead to the conditioned response no longer being produced
- B. repeated exposure of a stimulus that approximates the conditioned stimulus (such as a cartoon dog) without the unconditioned stimulus (being bitten) would eventually lead to the conditioned response no longer being produced
- C. repeated exposure of the actual conditioned stimulus (a dog) with a new unconditioned stimulus (such as relaxing music) would eventually lead to the association of a relaxation response to the conditioned stimulus
- D. repeated exposure of a stimulus that approximates the conditioned stimulus (such as a cartoon dog) with a new unconditioned stimulus (such as relaxing music) would eventually lead to the association of a relaxation response to the conditioned stimulus

Question 21

What is the difference between the neutral stimulus and the conditioned stimulus in Pavlov's experiment using dogs to associate a bell and meat powder?

- A. the neutral stimulus is the meat powder before acquisition, and the conditioned stimulus is the bell after acquisition
- B. the neutral stimulus is the bell before acquisition, and the conditioned stimulus is the meat powder after acquisition
- C. the neutral stimulus is the bell before acquisition, and the conditioned stimulus is the bell after acquisition
- D. the neutral stimulus is the meat powder before acquisition, and the conditioned stimulus is the meat powder after acquisition

Question 22

If a person loses two hours of REM sleep, it is likely that the following night s/he will experience

- A. microsleeps.
- B. REM rebound.
- C. REM recover.
- D. even less REM.

Question 23

Rufus has just completed an intense Psychology exam, whereas Yen has just completed an intense ultra-marathon run. Which of the following statements is most likely to be true?

- A. Yen will have slightly more REM sleep than Rufus that night.
- B. Rufus will have significantly more REM sleep than Yen that night.
- C. Yen will have significantly more NREM sleep than Rufus that night.
- D. Both B and C.

Question 24

Spatial neglect can be caused by stroke, affecting areas of the brain responsible for spatial reasoning. What is a stroke?

- A. A stroke occurs when blood supply to the brain is interrupted, which kills brain cells that rely on the oxygen that the blood carries.
- B. A stroke occurs when water supply to the brain is interrupted, which kills brain cells that rely on the oxygen that is carried in the water.
- C. A stroke is any brain injury.
- D. A stroke occurs when a person has a heart attack, and usually kills them.

Question 25

Which area of the brain is typically affected in spatial neglect patients?

- A. the occipital lobe of the right hemisphere
- B. the parietal lobe of the right hemisphere
- C. the occipital lobe of the left hemisphere
- D. the frontal lobe of the left hemisphere

Question 26

The _____ of the post-synaptic neuron receive nerve impulses from the pre-synaptic neuron, whereas the _____ transfer nerve impulses away from the soma towards other neurons.

- A. axons; dendrites
- B. synapses; axons
- C. dendrites; axons
- D. neurotransmitters; dendrites

Question 27

When constructing the forgetting curve, Hermann Ebbinghaus used nonsense syllables so that

- A. the meaningfulness of the items to be remembered was minimised as an extraneous variable.
- B. the rehearsal of the items to be remembered was eliminated as an extraneous variable.
- C. the memorisation of the items to be remembered was eliminated as an extraneous variable.
- D. no extraneous variables would be present in his study.

Question 28

Sigmund Freud was a prominent theorist in the study of the subconscious and unconscious mind. Which theory of forgetting involves deliberately forgetting unwanted information?

- A. decay theory
- B. repression
- C. suppression
- D. the tip-of-the-tongue phenomenon

Question 29

Reinforcement in observational learning can occur _____, which does not occur in operant conditioning.

- A. vicariously
- B. directly
- C. positively
- D. negatively

Question 30

Eustress typically involves

- A. no stress at all.
- B. significant amounts of stress.
- C. beneficial or desirable responses associated with the stressor.
- D. detrimental or undesirable responses associated with the stressor.

Question 31

In the assessment of intelligence, the mean IQ is 100 and the standard deviation is 15. Having an IQ above 150 would be considered abnormal according to the _____ approach to normality.

- A. medical
- B. historical
- C. statistical
- D. functional

Question 32

Sustained concentration on simple tasks is _____ affected by sleep deprivation compared to short, complex tasks.

- A. less
- B. more
- C. not
- D. insignificantly

Question 33

Which of the following is not a psychological symptom of partial sleep deprivation?

- A. reduced ability to perform automatic processes
- B. reduced ability to perform controlled processes
- C. droopy eyelids
- D. difficulty paying attention

Question 34

After several good night's rest, what are the long term effects of sleep deprivation?

- A. reduced ability to perform automatic processes
- B. reduced ability to perform controlled processes
- C. persistent hallucinations
- D. none of the above

Question 35

How do sensitive periods differ from critical periods?

- A. a sensitive period is the timeframe when experience-dependent learning ideally takes place, whereas a critical period is the timeframe when experience-dependent learning must take place in order for the organism to learn from that experience
- B. a sensitive period is the timeframe when experience-expectant learning ideally takes place, whereas a critical period is the timeframe when experience-expectant learning must take place in order for the organism to learn from that experience
- C. sensitive periods only occur in non-human animals, whereas critical periods only occur in humans
- D. sensitive periods only occur in humans, whereas critical periods only occur in non-human animals

Question 36

Which of the following is not a similarity between developmental and adaptive plasticity?

- A. both developmental and adaptive plasticity involve changes to the brain
- B. both developmental and adaptive plasticity involve changes to the brain across the lifespan
- C. both developmental and adaptive plasticity involve synaptogenesis
- D. both developmental and adaptive plasticity decline as age progresses

Question 37

Which of the following types of memory is likely to be most negatively affected with age?

- A. procedural memory
- B. semantic memory
- C. episodic memory
- D. factual memory

Question 38

Which of the following types of memory is likely to be least negatively affected with age?

- A. procedural memory
- B. semantic memory
- C. episodic memory
- D. factual memory

Use the following information to answer Questions 39-46.

Frederick is in the process of planning his 18th birthday party. He is deciding to hire a function room at either of his two favourite restaurants; the 'Jade Phoenix' restaurant and the 'Happy Dumpling' restaurant.

Question 39

Frederick rings up the restaurants for their function menu prices for 40 people. The Jade Phoenix restaurant quotes for \$75 per person for a banquet, and the Happy Dumpling restaurant quotes for \$12 per person for a banquet. His _____ will direct his _____ to update his memory of the two restaurants' function prices.

- A. visuo-spatial sketchpad; central executive
- B. phonological loop; episodic buffer
- C. central executive; episodic buffer
- D. episodic buffer; central executive

Question 40

In order for Frederick to remember the prices associated with each restaurant in the long term, the memories require a process of consolidation. This process requires

- A. time.
- B. no interference to the memory trace.
- C. a physical change to occur in the brain.
- D. all of the above.

Question 41

Which part of Frederick's brain is responsible for consolidating this information?

- A. the hippocampus
- B. the amygdala
- C. the primary visual cortex
- D. the primary auditory cortex

Question 42

Frederick's _____ would be most dominant while he imagines the function rooms at the restaurants and where all of his friends will sit, whereas when he weighs up the pros and cons of either venue, his _____ would be most dominant.

- A. right hemisphere; left hemisphere
- B. left hemisphere; right hemisphere
- C. frontal lobe; occipital lobe
- D. temporal lobe; parietal lobe

Question 43

After consulting his parents, Frederick decides to book the Happy Dumpling restaurant with the manager, Sofia.

Why is it more likely that Frederick would confuse 'Sofia' and 'Sophie', compared to distinct names such as 'Bernadette' and 'Sophie'?

- A. distinct information is more prone to retrieval failure
- B. similar information is more prone to motivated forgetting
- C. distinct information is more prone to decay
- D. similar information is more prone to interference

Question 44

Frederick discusses his birthday plans with his best friend, Jimbo, over dinner at Jimbo's place. Frederick is introduced to Jimbo's parents; Sophie and Sam.

Now each time Frederick calls Sofia about making arrangements at the Happy Dumpling restaurant, he finds it very difficult to call her by her correct name, and not by Sophie. This difficulty is due to

- A. retroactive interference
- B. proactive interference
- C. retrograde amnesia
- D. anterograde amnesia

Question 45

Frederick has a great time at his 18th birthday party at the Happy Dumpling restaurant. Each time he revisits the Happy Dumpling restaurant, he is reminded of the great time he had at his 18th birthday. The Happy Dumpling restaurant is acting as a _____, which triggers the memory of his 18th birthday.

- A. episodic memory
- B. state-dependent cue
- C. context-dependent cue
- D. state-dependent and context-dependent cue

Question 46

62 years on, Frederick has not thought much of his 18th birthday party. At his 80th birthday party, Frederick's grandkids ask him what he did for his 18th birthday. Frederick fondly and vividly recalls his banquet at the Happy Dumpling restaurant. Remembering vivid memories that have not been recently rehearsed is said to be a limitation of

- A. retrieval failure theory.
- B. interference theory.
- C. motivated forgetting.
- D. decay theory.

Question 47

How could shaping be described in terms of acquisition?

- A. the establishment of a learned response is achieved by punishing successful approximations of the desired behaviour
- B. the establishment of a learned response is achieved by reinforcing successful approximations of the desired behaviour
- C. the establishment of a learned response is achieved by punishing successive approximations of the desired behaviour
- D. the establishment of a learned response is achieved by reinforcing successive approximations of the desired behaviour

Use the following information to answer Questions 48-52.

Rex, Liz's dog, runs towards Liz whenever he hears the electric tin opener being used.

Question 48

At first, Rex used to run towards Liz in the hope of food whenever he heard a strange noise coming from the kitchen. This response was only reinforced when Liz was using the electric tin opener to open cans of dog food, not when Liz was blending her smoothies. Eventually, Rex learnt that running towards Liz when the electric tin opener was being used was the only response that resulted in a reward. Rex's process of learning is also known as

- A. classical conditioning.
- B. observational learning.
- C. trial and error learning.
- D. vicarious learning.

Question 49

Providing food to Rex could be seen as positive reinforcement because it would add a/n _____ stimulus that _____ the likelihood of the behaviour of running towards Liz at the sound of the electric tin opener.

- A. aversive; increases
- B. pleasant; increases
- C. aversive; decreases
- D. pleasant; decreases

Question 50

Yelling at Rex could be seen as positive punishment because it would add a/n _____ stimulus that _____ the likelihood of the behaviour of running towards Liz at the sound of the blender.

- A. aversive; increases
- B. pleasant; increases
- C. aversive; decreases
- D. pleasant; decreases

Question 51

The role of the learner (Rex) in this situation is relatively _____ and the nature of his response is _____.

- A. active; reflexive
- B. passive; voluntary
- C. passive; reflexive
- D. active; voluntary

Question 52

The sound of the electric tin can opener could be considered the

- A. response
- B. behaviour
- C. consequence
- D. discriminative stimulus

Question 53

Biofeedback involves

- A. receiving information about physiological arousal
- B. receiving information about psychological arousal
- C. meditation about psychological wellbeing
- D. medication for physiological illness

Question 54

Tarryn accidentally knocks her big toe on the leg of a chair. Which area of her brain is primarily processing this information?

- A. the upper part of her primary somatosensory cortex
- B. the lower part of her primary somatosensory cortex
- C. the upper part of her primary motor cortex
- D. the lower part of her primary motor cortex

Question 55

Which lobe's association area is primarily involved in giving Tarryn spatial awareness?

- A. frontal
- B. parietal
- C. occipital
- D. temporal

Question 56

Which of the following is false?

- A. the cerebral cortex is larger than the frontal lobe
- B. the cerebral cortex is approximately 2-5cm thick
- C. the cerebral cortex covers two cerebral hemispheres
- D. the cerebral cortex is convoluted

Question 57

The first sign of Alzheimer's disease is often _____, but a conclusive diagnosis of the disease can only be made _____.

- A. loss of short term memory; through an autopsy.
- B. loss of short term memory; using psychological tests such as asking the patient whether s/he remembers a series of numbers
- C. loss of long term memory; through an autopsy.
- D. loss of long term memory; using psychological tests such as asking the patient whether s/he remembers a series of numbers

Question 58

Alzheimer's disease is a neurodegenerative disease which eventually results in

- A. anterograde amnesia
- B. retrograde amnesia
- C. retroactive interference
- D. both anterograde and retrograde amnesia

Question 59

Stage 4 NREM sleep can be indicated on an electroencephalograph which would likely show

- A. low amplitude, low frequency waves
- B. low amplitude, high frequency waves
- C. high amplitude, low frequency waves
- D. high amplitude, high frequency waves

Question 60

K complexes are typical of which stage of sleep?

- A. stage 1 NREM sleep
- B. stage 2 NREM sleep
- C. stage 3&4 NREM sleep
- D. REM sleep

Question 61

Which of the following is true about the survival theory of sleep?

- A. it explains why sleep involves a loss of awareness, given that prey are more vulnerable to being preyed upon if they do not respond quickly to dangers in the environment
- B. it explains why sleep is necessary
- C. it explains why sleep depends on an animal's vulnerability to predators
- D. it does not explain why animals that need to graze for long periods of time, such as cows, sleep relatively less

Question 62

How are fixed action patterns different from reflexes?

- A. fixed action patterns are not species-specific and tend to involve simplistic responses, whereas reflexes are species-specific and tend to involve complex behaviours
- B. fixed action patterns are not species-specific and tend to involve complex behaviours, whereas reflexes are species-specific and tend to involve simplistic responses
- C. fixed action patterns are species-specific and tend to involve simplistic responses, whereas reflexes are not species-specific and tend to involve complex behaviours
- D. fixed action patterns are species-specific and tend to involve complex behaviours, whereas reflexes are not species-specific and tend to involve simplistic responses

Question 63

The mnemonic EFTPOS to remember 'Electronic Funds Transfer at Point Of Sale', could be considered a/n

- A. acrostic.
- B. acronym.
- C. antonym.
- D. narrative chain.

Question 64

How could a leading question produce incorrect memories of a witnessed event?

- A. leading questions will most likely guide a witness to recall details of what actually occurred
- B. the process of memory search can be influenced by words in a leading question, which may contain cues that lead to the recall of incorrect information
- C. misinformation that is presupposed by a leading question may be stored as part of an updated version of the memory
- D. both B and C

Question 65

Which of the following is true about auditory memory and the phonological loop?

- A. echoic memory is the same as the phonological loop
- B. echoic memory is a type of working memory, whereas the phonological loop is a type of sensory memory
- C. echoic memory is a type of sensory memory, whereas the phonological loop is a type of working memory
- D. echoic memory and the phonological loop both process visual information

SECTION B – Short-answer questions**Instructions for Section B**

Answer **all** questions in the spaces provided. Write using black or blue pen.

Question 1 (3 marks)

Describe the changes to content limitations, perception and cognition that would be likely to occur when in an alcohol-induced altered state of consciousness, as compared to normal waking consciousness.

Question 2 (2 marks)

Can a person process information when they are not consciously aware of it? Justify your answer with an example.

Question 3 (3 marks)

Would a ratio schedule of reinforcement or an interval schedule of reinforcement more likely to lead to a relatively high rate of responding, and why?

Question 4 (4 marks)

Using examples, describe the difference between explicit and implicit memories.

Question 5 (7 marks)

a. Using examples, explain the difference between cued recall and recognition.

4 marks

b. Which is a less sensitive measure of retention; cued recall or recognition? Why?

3 marks

Question 6 (4 marks)

Short Term Memory (STM) is a limited capacity store. Name and explain two ways information can be lost from STM.

Question 7 (16 marks)

When she was younger, Lily experienced many episodes of frightening turbulence on several flights from Melbourne to Sydney. Lily now has a persistent, intense and irrational fear of flying.

- a.** Using the language of classical conditioning, explain how Lily may have acquired a fear of flying. 6 marks

- b.** Describe the primary and secondary appraisals that Lily is likely to make if she flies from Melbourne to Sydney again and how these may lead her to feel stressed. 3 marks

- c.** Lily has worked with a Psychologist who seems to have reduced her fear of flying. Lily decides to take a flight to Sydney for a major business deal. 2 marks

As the flight takes off, Lily begins to panic. Unfortunately, she experiences several periods of turbulence on the flight, which results in her becoming very anxious.

Is it likely that Lily would have an increased or decreased allostatic load on the flight? Justify your answer.

- d.** How could we know if Lily is experiencing allostatic overload? 1 mark

- e.** Lily is relieved and feels calm when she walks into Sydney airport. Now that she is on the ground, her body will move into a state of _____, which is maintained by the _____ division of the _____ nervous system, which is part of the peripheral nervous system. 3 marks

- f.** Describe a social factor that may alleviate Lily's stress. 1 mark

Question 8 (5 marks)

Rhonda is unable to speak meaningfully and Charlotte is unable to speak fluently.

a. What is aphasia?

1 mark

b. What kind of aphasia is Rhonda likely to have? Describe a cognitive symptom (other than being unable to speak meaningfully) that Rhonda may have, that distinguishes her condition from Charlotte.

2 marks

c. What kind of aphasia is Charlotte likely to have? Describe a cognitive symptom (other than being unable to retrieve the articulation codes for language) that Charlotte may have, that distinguishes her condition from Rhonda.

2 marks

Question 9 (6 marks)

Bec is having her sleep monitored in a sleep laboratory. She has electrodes placed over her jaw muscles and near her eyes.

- a.** Which device is likely to be placed over her jaw muscles, and what does this device measure? 2 marks

- b.** Which device is likely to be placed near her eyes, and what does this device measure? 2 marks

- c.** What stage of sleep would the device outlined in 9b be best at identifying? 1 mark

- d.** Describe one limitation for using a sleep laboratory to study sleep. 1 mark

Question 10 (10 marks)

Linda is 7 years old, and is learning Indonesian as a second language at school.

- a.** With reference to developmental and adaptive plasticity, why would it be easier for her to learn Indonesian as a second language at her age, compared to when she is 50 years old? 2 marks

- b.** The more that Linda rehearses Indonesian vocabulary, the more the activated neuronal connections are strengthened. Describe two of the changes that would occur in order to strengthen these neural connections. 2 marks

- c.** Linda receives praise from her Indonesian teacher every time she studies in the library, which leads her to study there often. Linda is always spotted in the library each time she goes to study, because her Indonesian teacher also runs the library. Describe how the three phase model of operant conditioning could be applied to this scenario. 3 marks

- d.** Which schedule of reinforcement is her Indonesian teacher applying to Linda, and why might the teacher do this? 2 marks

- e.** Linda's Indonesian teacher falls ill and is unable to praise Linda each time she studies in the library. Explain why Linda's behaviour is likely to be extinguished. 1 mark

SECTION C – Research scenario**Instructions for Section C**

Answer the questions in the spaces provided. Write using black or blue pen.

Your responses may include diagrams, charts and tables.

Dr Waters has spent many years formulating a new pill that she believes enhances memory. To test this, she randomly sampled 50 participants from a population of VCE Psychology students at Uptown High School, then randomly allocated them into two groups. Dr Waters also used a single-blind procedure to ensure that participants did not know which group they had been allocated to.

Group 1 consumed the ‘memory pill’ one hour before undertaking a memory test, whereas Group 2 consumed a sugar pill one hour before undertaking the same memory test. The memory test involved participants memorising a list of 20 unrelated words for two minutes, then recalling them in any order immediately afterwards. The alpha level, or significance level, was set at $p \leq 0.05$.

The results were summarised in the table below.

	Group 1	Group 2
Mean words correctly recalled out of 20	13.5	9.8
Median words correctly recalled out of 20	13.5	12

Dr Waters found a p value of $p = 0.09$ from her data.

Question 1 (4 marks)

Describe how a placebo differs from the placebo effect, using examples from Dr Waters’ experiment.

What is one ethical challenge that Dr Waters may face in getting a truly random sample?

- A research hypothesis and whether or not it was supported
- An interpretation of the descriptive and inferential statistics in relation to the hypothesis
- A discussion of limitations and suggestions for suitable improvements if the research were to be repeated.

[illegible]

END OF QUESTION AND ANSWER BOOK

Clearly number all responses in this space.

[illegible]



VCE PSYCHOLOGY
Written Examination
ANSWER SHEET – 2015

**STUDENT
NAME:**

Use a **PENCIL** for **ALL** entries. For each question, shade the box which indicates your answer.

Marks will **NOT** be deducted for incorrect answers.

NO MARK will be given if more than one answer is completed for any question.

If you make a mistake, **ERASE** the incorrect answer – **DO NOT** cross it out.

1	A	B	C	D	23	A	B	C	D	45	A	B	C	D
2	A	B	C	D	24	A	B	C	D	46	A	B	C	D
3	A	B	C	D	25	A	B	C	D	47	A	B	C	D
4	A	B	C	D	26	A	B	C	D	48	A	B	C	D
5	A	B	C	D	27	A	B	C	D	49	A	B	C	D
6	A	B	C	D	28	A	B	C	D	50	A	B	C	D
7	A	B	C	D	29	A	B	C	D	51	A	B	C	D
8	A	B	C	D	30	A	B	C	D	52	A	B	C	D
9	A	B	C	D	31	A	B	C	D	53	A	B	C	D
10	A	B	C	D	32	A	B	C	D	54	A	B	C	D
11	A	B	C	D	33	A	B	C	D	55	A	B	C	D
12	A	B	C	D	34	A	B	C	D	56	A	B	C	D
13	A	B	C	D	35	A	B	C	D	57	A	B	C	D
14	A	B	C	D	36	A	B	C	D	58	A	B	C	D
15	A	B	C	D	37	A	B	C	D	59	A	B	C	D
16	A	B	C	D	38	A	B	C	D	60	A	B	C	D
17	A	B	C	D	39	A	B	C	D	61	A	B	C	D
18	A	B	C	D	40	A	B	C	D	62	A	B	C	D
19	A	B	C	D	41	A	B	C	D	63	A	B	C	D
20	A	B	C	D	42	A	B	C	D	64	A	B	C	D
21	A	B	C	D	43	A	B	C	D	65	A	B	C	D
22	A	B	C	D	44	A	B	C	D					