



VCE PSYCHOLOGY 2016

YEAR 12 TRIAL EXAM

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Units 3/4

Reading time: 15 minutes

Writing time: 2 hours 30 minutes

<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	22	22	60
C	4	4	15
			Total 140

An Answer Sheet is provided for Section A.
Answer all questions in Section B in the space provided.
Answer all questions in Section C in the space provided.

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STUDENT NUMBER

Figures

Words

Letter

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Student Name.....

VCE Psychology 2016 Year 12 Trial Exam Units 3/4

Student Answer Sheet

There are **65 Multiple Choice** questions to be answered by circling the correct letter in the table below. Use only a 2B pencil. If you make a mistake, erase it and enter the correct answer. Marks will not be deducted for incorrect answers.

<i>Question 1</i>	A	B	C	D	<i>Question 2</i>	A	B	C	D
<i>Question 3</i>	A	B	C	D	<i>Question 4</i>	A	B	C	D
<i>Question 5</i>	A	B	C	D	<i>Question 6</i>	A	B	C	D
<i>Question 7</i>	A	B	C	D	<i>Question 8</i>	A	B	C	D
<i>Question 9</i>	A	B	C	D	<i>Question 10</i>	A	B	C	D
<i>Question 11</i>	A	B	C	D	<i>Question 12</i>	A	B	C	D
<i>Question 13</i>	A	B	C	D	<i>Question 14</i>	A	B	C	D
<i>Question 15</i>	A	B	C	D	<i>Question 16</i>	A	B	C	D
<i>Question 17</i>	A	B	C	D	<i>Question 18</i>	A	B	C	D
<i>Question 19</i>	A	B	C	D	<i>Question 20</i>	A	B	C	D
<i>Question 21</i>	A	B	C	D	<i>Question 22</i>	A	B	C	D
<i>Question 23</i>	A	B	C	D	<i>Question 24</i>	A	B	C	D
<i>Question 25</i>	A	B	C	D	<i>Question 26</i>	A	B	C	D
<i>Question 27</i>	A	B	C	D	<i>Question 28</i>	A	B	C	D
<i>Question 29</i>	A	B	C	D	<i>Question 30</i>	A	B	C	D
<i>Question 31</i>	A	B	C	D	<i>Question 32</i>	A	B	C	D
<i>Question 33</i>	A	B	C	D	<i>Question 34</i>	A	B	C	D
<i>Question 35</i>	A	B	C	D	<i>Question 36</i>	A	B	C	D
<i>Question 37</i>	A	B	C	D	<i>Question 38</i>	A	B	C	D
<i>Question 39</i>	A	B	C	D	<i>Question 40</i>	A	B	C	D

Question 41 A B C D
Question 43 A B C D
Question 45 A B C D
Question 47 A B C D
Question 49 A B C D
Question 51 A B C D
Question 53 A B C D
Question 55 A B C D
Question 57 A B C D
Question 59 A B C D
Question 61 A B C D
Question 63 A B C D
Question 65 A B C D

Question 42 A B C D
Question 44 A B C D
Question 46 A B C D
Question 48 A B C D
Question 50 A B C D
Question 52 A B C D
Question 54 A B C D
Question 56 A B C D
Question 58 A B C D
Question 60 A B C D
Question 62 A B C D
Question 64 A B C D

VCE Psychology 2016 Year 12 Trial Exam Units 3/4

SECTION A – Multiple Choice Questions

Question 1

Michael has severe epilepsy. To treat his condition, surgeons have recommended that he undergoes a commissurotomy. This procedure involves the severing of the

- A. cerebral cortex.
- B. cerebellum.
- C. corpus callosum.
- D. medulla.

Question 2

Which of the following statements is true regarding the cerebral cortex?

- A. The cerebral cortex is a thick bundle of nerve fibres connecting the two hemispheres of the brain.
- B. The cerebral cortex protects the brain from injury.
- C. The cerebral cortex allows the transfer of information between the two hemispheres.
- D. The cerebral cortex enables a person to perceive touch, temperature and pressure.

Question 3

Alicia is watching television. After a while, she stops paying attention to the show she is watching and instead thinks about school, in particular, the school work she must do and the preparation required for her end of year exams. Which of the following best describes Alicia's state of consciousness?

- A. Alicia is experiencing NWC while paying attention to the television show, however an ASC while thinking about school.
- B. Alicia is experiencing NWC while watching television and also when thinking about school.
- C. Alicia is experiencing an ASC while paying attention to the television show, however NWC while thinking about school.
- D. Alicia is experiencing NWC while paying attention to the television show, however she is experiencing a daydream while thinking about school.

Question 4

The Galvanic Skin Response (GSR) is a physiological response that can be used to determine whether someone is experiencing an altered state of consciousness. However, recordings can sometimes be misleading. This is because

- A. people can sweat for a number of reasons not associated with an altered state of consciousness.
- B. an increased amount of sweat on the palm of the hand will only show low levels of arousal.
- C. GSR recordings are only accurate for adults and not children or adolescents.
- D. the amount of sweat produced on the palm of the hand is largely determined by the size of the individual's hand and not necessarily the state of consciousness they are in.

Questions 5-8 refer to the following information.

Alex has had difficulty sleeping for the past few months. He decides to visit a sleep laboratory to determine the quality, quantity and type of sleep he is experiencing. During his visit, sleep specialists connect him to a device known as an EMG.

Question 5

Where on Alex's body would the sleep specialists place the electrodes for the EMG?

- A. On his scalp.
- B. Behind his ears.
- C. Under his chin.
- D. One electrode would be placed on his forehead, while the other two would be placed beside each eye.

Question 6

What would the EMG detect?

- A. Muscle tension.
- B. Eye movement.
- C. Brain activity.
- D. A combination of eye movement and muscle tension.

Question 7

How could the sleep specialists use the EMG recording to determine the stage of sleep Alex was experiencing?

- A. Low electrical activity would indicate beta-like brainwaves and therefore the sleep specialist would infer that Alex is experiencing REM sleep.
- B. High electrical activity would indicate rapid eye movement and therefore the sleep specialist would infer that Alex is experiencing REM sleep.
- C. Little to no electrical activity would indicate little to no muscle tension and therefore the sleep specialist would infer that Alex is experiencing REM sleep.
- D. High electrical activity would indicate little to no muscle tension and therefore the sleep specialist would infer that Alex is experiencing NREM sleep.

Question 8

When Alex leaves the sleep centre, the sleep specialists suggest that he completes a self-report over the course of the next week. Which of the following statements is correct regarding self-reports?

- A. Self-reports generate objective data.
- B. Self-reports can generate both qualitative and quantitative data.
- C. Self-reports are incredibly accurate because participants usually tell the truth.
- D. Self-reports are accurate in determining physiological measures such as brainwave patterns, muscle tension and movement of the eyes.

Questions 9 and 10 refer to the following information.

Lexi has just turned 18 and recently got her license. Unfortunately for Lexi, she is also addicted to Facebook and checks it during most waking moments. One week after getting her license, Lexi is involved in a serious car accident because she was checking Facebook while driving. As a result of the accident, Lexi sustained brain damage causing her speech to be slow and deliberate.

Question 9

The most likely reason that Lexi was unable to speak on her phone and drive at the same time is because

- A. driving for Lexi is an automatic processes and therefore requires high levels of attention.
- B. driving for Lexi is a controlled processes and therefore requires little attention.
- C. using Facebook is a controlled processes and therefore requires little attention.
- D. driving for Lexi is a controlled processes and therefore requires selective attention.

Question 10

The area of her brain most likely to be damaged is the left _____ lobe resulting in _____ aphasia.

- A. temporal; Wernicke's
- B. frontal; Wernicke's
- C. frontal; Broca's
- D. temporal; Broca's

Question 11

Joel is a split brain patient who is blindfolded. A screwdriver is placed into his left hand. Joel is asked to name the object in his left hand. Which of the following statements is correct regarding Joel's possible response?

- A. Joel will be able to verbally say the word "screwdriver".
- B. Joel will be unable to say the word screwdriver, however will be able to identify it with his right hand amongst a group of objects.
- C. Joel will be unable to say the word screwdriver, however will be able to identify it with his left hand amongst a group of objects.
- D. Joel will be able to verbally say the word "screwdriver" and identify it with his left hand amongst a group of objects.

Questions 12 and 13 refer to the following information.

Claire usually sleeps for 8 hours each night. The night before her Psychology exam, Claire decides to stay up all night and study. As a result, she experiences no sleep and is suffering from sleep deprivation.

Question 12

Which of the following physiological effects of sleep deprivation is likely to impact on Claire's ability to perform well in her exam?

- A. Claire will be irritable during the exam and therefore more likely to give up on questions easily.
- B. Claire's hands may shake during the exam and therefore she is unable to write at her normal speed and legibility.
- C. Claire will lose motivation during the exam and not attempt questions that she usually would.
- D. Claire will be unable to concentrate on the questions and is therefore more likely to misread them.

Question 13

Claire goes to bed early that night following her Psychology examination. Which of the following statements is correct regarding Claire's sleep patterns?

- A. Claire is likely to experience less REM sleep than usual.
- B. Claire is likely to make up for the amount of sleep that she lost by sleeping a total of 16 hours.
- C. Claire is likely to find it difficult to fall asleep as she is constantly thinking about the psychology exam she did that day.
- D. Claire is likely to sleep for longer than usual, however, will not need to make up for the entire amount of sleep that was lost.

Question 14

Rachel decides to get a tattoo. She is very nervous beforehand and decides to consume 3 alcoholic drinks to relax herself and make her feel less anxious. The consumption of the alcoholic drinks places Rachel into an altered state of consciousness. When getting the tattoo done, Rachel is likely to experience

- A. more pain due to an increased pain threshold.
- B. less pain due to an increased pain threshold.
- C. more pain due to a decreased pain threshold.
- D. less pain due to a decreased pain threshold.

Question 15

Daydreaming is considered to be an altered state of consciousness because

- A. content is more limited.
- B. controlled processes are more easily performed.
- C. automatic processes are more easily performed.
- D. changes in emotional awareness may occur.

Question 16

Mr Johnson, a lecturer at a Melbourne University, conducted an experiment on some first year Psychology students. At the conclusion of the experiment, he published the results on the door of his office for his students to see. The results included the names of the students and the result that each student obtained. Which ethical principal did Mr Johnson breach?

- A. Voluntary participation.
- B. Withdrawal rights.
- C. Confidentiality.
- D. Beneficence.

Questions 17 and 18 refer to the following information.

Ayla is celebrating her 10th birthday and decides to have a party. She invites 3 friends (Sally, Emma and Claire) for a sleep over. Just before bed, the four girls sit down to watch a movie. Half way through the movie, Ayla is still wide awake, Sally is feeling very relaxed and is nearly asleep, Emma has just fallen asleep, and Claire has been asleep for approximately 40 minutes.

Question 17

Which of the girls is most likely experiencing a mixture of theta and alpha brainwaves?

- A. Ayla.
- B. Sally.
- C. Emma.
- D. Claire.

Question 18

The brainwave patterns being experienced by Claire are likely to be

- A. beta-like.
- B. sleep spindle and K complexes.
- C. theta and Beta-like.
- D. high amplitude and low frequency.

Question 19

As a person ages, a few changes occur in relation to the type of sleep they experience and the timing of when certain hormones are released. Which of the following is **not** one of these changes?

- A. There is a delayed release of melatonin in adults compared with adolescents.
- B. As a percentage of total sleep, adults spend less time in REM sleep and more time in NREM sleep.
- C. Adolescents sleep less than new born babies.
- D. There is a delayed release of cortisol in adolescents compared to adults.

Question 20

Jamal is at a night club with friends and begins chatting to a woman. The woman tells Jamal her mobile phone number. Jamal has no way of writing it down and therefore constantly repeats the number over and over in his head until one of his friends is able to give him a pen. This constant repetition is an example of

- A. elaborative rehearsal.
- B. chunking.
- C. a mnemonic device.
- D. maintenance rehearsal.

Question 21

Chloe is sitting in her Year Twelve Psychology class. She is listening intently to what her teacher is saying so that she can commit the information to memory. Chloe is aware that she has a Psychology test next Thursday and will need to spend a lot of time studying in preparation for this. Which of the following statements is **incorrect** regarding the process of memory in terms of this scenario?

- A. When Chloe transforms information that her Psychology teacher is saying into a form that can then be held in her memory, this is called “encoding”.
- B. When Chloe is sitting her Psychology test and obtains the information from memory to answer questions, she is using “retrieval”.
- C. When Chloe holds the information in memory from the time her teacher says it until it is needed, this is called “storage”.
- D. When Chloe writes on the test paper the answers to the questions, she is using “procedural processing”.

Question 22

Which of the following statements is true regarding iconic and echoic memory?

- A. Iconic memory refers to our visual sensory memory and has an unlimited capacity whereas echoic memory refers to our auditory sensory memory and also has an unlimited capacity.
- B. Iconic memory refers to our auditory sensory memory and has an unlimited capacity whereas echoic memory refers to our visual sensory memory and also has an unlimited capacity.
- C. Iconic memory refers to our auditory sensory memory and has a limited capacity whereas echoic memory refers to our visual sensory memory and also has a limited capacity.
- D. Iconic memory refers to our visual sensory memory and has a limited capacity whereas echoic memory refers to our auditory sensory memory and has an unlimited capacity.

Question 23

Courtney is trying to remember Tia’s mobile phone number which is 4 0 5 3 9 8 1 7 4 6. To do so, she decides to use chunking. Which of the following statements is **incorrect** regarding chunking in reference to this scenario?

- A. Chunking is the breaking down of large pieces of information into smaller units or chunks. In this scenario, Courtney would break down Tia’s 10-digit mobile phone number into 3 separate numbers of 4053 981 746.
- B. Courtney would combine smaller items together into larger units or chunks. In this scenario, Tia’s mobile phone number consists of 10 individual numbers. These numbers would be combined to create only 3 numbers being 4053 981 746.
- C. Chunking works best when the units or chunks are meaningful. In this scenario, Courtney would benefit by creating chunks that were meaningful to her. For example, 4053 is her highest score on Tetris, 981 is her house number and 746 are the last three digits of her home phone number.
- D. Chunking increases the capacity of short term memory, but not the duration. Therefore, in this scenario, Tia should be able to commit more information to short term memory in addition to Tia’s mobile phone number if chunking was used.

Question 24

Kysha has just started at a new school. She is introduced to many new people on her first day and therefore tries her best to remember as many names as possible. To do this, Kysha decides to use elaborative rehearsal. This would involve

- A. Kysha writing down the names of all the people she met and later that night, reading over this list many times.
- B. Kysha sub-vocally repeating these names over and over in her head.
- C. Kysha linking characteristics of each new person and their name to something already stored in her long term memory.
- D. Kysha meeting each person on numerous occasions to strengthen her synaptic connections and therefore, also her memory.

Question 25

Natalie has been asked to recall all 18 AFL teams. In doing so, she is given the option of either using free recall, serial recall or cued recall. For Natalie to correctly recall the most amount of AFL teams, which method should she choose?

- A. Free Recall.
- B. Serial Recall.
- C. Cued Recall.
- D. This would depend on how well she knows the names of the AFL teams.

Question 26

Michael is at home when the phone rings. The call is from his mother who wants Michael to go to the shops to buy a number of grocery items. Michael does not have a pen handy and when he puts down the phone he quickly searches the house for a pen to write down the items his mother wanted him to buy. The process of finding a pen takes approximately one minute. When he finishes writing the list, he realises that some items are missing. Michael is most likely to have forgotten which items?

- A. Items at the beginning of the list.
- B. Items at the end of the list.
- C. Items at the beginning and middle of the list.
- D. There will be an equal spread of items located at the beginning, middle and end of the list.

Question 27

Which of the following statements is true regarding the Atkinson and Shiffrin multi-store model of memory?

- A. Information can only enter short term memory from sensory memory.
- B. Information can only enter short term memory from long term memory.
- C. Information that is elaborately rehearsed will most likely enter long term memory.
- D. Information that is forgotten in long term memory will enter short term memory.

Questions 28 and 29 refer to the following information.

Jackson is catching a bus to a local football game. When he boards the bus, he has a brief conversation with the driver and then decides to take a seat in the back row. As he walks to the back of the bus, he notices that there are also exit doors approximately half way along the bus.

Question 28

According to Baddeley and Hitch's model of working memory, which of the following statements is true?

- A. Jackson used his phonological loop during his brief conversation with the bus driver, he used his visuospatial sketchpad when he decided to take a seat in the back row and his episodic buffer when remembering that there are two exit doors to the bus.
- B. Jackson used his phonological loop during his brief conversation with the bus driver, he used his central executive when he decided to take a seat in the back row and his visuospatial sketchpad when remembering that there are two exit doors to the bus.
- C. Jackson used his central executive during his brief conversation with the bus driver, he used his episodic buffer when he decided to take a seat in the back row and his phonological loop when remembering that there are two exit doors to the bus.
- D. Jackson used his episodic buffer during his brief conversation with the bus driver, he used his central executive when he decided to take a seat in the back row and his phonological loop when remembering that there are two exit doors to the bus.

Question 29

Jackson thoroughly enjoyed the football match. Three weeks later, Jackson was able to remember his day at the local football game because a/n _____ was formed.

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

Question 30

Marcus was given a dog for his 10th birthday. He was very excited about receiving the dog as it is something that he has always wanted. When forming the memory of this experience, a number of different areas of the brain were involved. The memory of the fact that he received a dog would have been formed by his _____ whereas the memory of the emotion he experienced when he received the dog would have been formed by his _____.

- A. hippocampus; amygdala
- B. amygdala; hippocampus
- C. hypothalamus; amygdala
- D. cerebellum; basal ganglia

Question 31

Jane has recently commenced University after completing Year 12 last year. Each time she is asked to write down her University ID number, she accidentally confuses it with her Year 12 VCAA number. In terms of interference theory, Jane is experiencing

- A. retrograde interference.
- B. proactive interference.
- C. retroactive interference.
- D. retrieval failure interference.

Questions 32-34 refer to the following information.

It is the night before his Psychology examination and Sebastian has spent 3 hours studying. It is now 10:30pm.

Question 32

Sebastian should

- A. read a book to relax.
- B. study Business Management as this examination is scheduled a few days after Psychology.
- C. go straight to sleep.
- D. continue studying all night as the more study he does, the better he will perform.

Question 33

When sitting his exam, Sebastian is required to state two functions of Broca's area. He is aware that his teacher has been over this many times before and he is sure that he knows this information but is unable to access it during the exam. Sebastian is experiencing

- A. decay.
- B. interference.
- C. motivated forgetting.
- D. tip of the tongue phenomenon.

Question 34

At the conclusion of the examination, Sebastian is still unable to remember two functions of Broca's area. He leaves the exam frustrated and meets his teacher in their Psychology classroom where all of their classes have been conducted this year. As soon as Sebastian enters the room, he suddenly remembers the functions of Broca's area. Which of the following is true relating to this scenario?

- A. The classroom is a state dependent cue.
- B. The classroom is a context dependent cue.
- C. The teacher is a state dependent cue.
- D. The teacher is a context dependent cue.

Question 35

When Madeleine was a child, she witnessed a bank robbery. She found this to be a traumatic experience. In the years that followed, every time someone asked her about the robbery she refused to answer and would quickly change the subject of conversation. Whenever news items relating to robberies were on the television, Madeleine was quick to change the channel. Madeleine is now 38 years old and has difficulty trying to recall the details of the robbery.

This is due to

- A. repression.
- B. decay.
- C. retrieval failure.
- D. suppression.

Question 36

The correct order from least to most sensitive in terms of retention is

- A. recall, recognition, relearning.
- B. relearning, recognition, recall.
- C. recall, relearning, recognition.
- D. recognition, relearning, recall.

Questions 37 and 38 refer to the following information.

Joseph is trying to learn the following 5 words – hotel, swimming, hot, sand and wave. He decides to think of a short story in an attempt to remember these words.

Question 37

In this scenario, Joseph is using

- A. an acronym.
- B. an acrostic.
- C. narrative chaining.
- D. a mnemonic device.

Question 38

In this scenario, the story acts as a

- A. context dependent cue.
- B. retrieval cue.
- C. state dependent cue.
- D. state and context dependent cue.

Question 39

When Marcus fell off his bike, he hit his head and was rushed to hospital. When he was lying in the hospital bed, the doctor entered the room and introduced himself as Dr Rady. Later that evening, Dr Rady entered the room once again and Marcus could not remember the doctor's name or the fact that the two of them had met earlier. This suggests that Marcus may be suffering from

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

Question 40

Research into studies on learning suggest that the _____ plays a role in declarative learning, whereas the amygdala plays a role in _____ learning.

- A. hippocampus; emotional
- B. hypothalamus; emotional
- C. cerebellum; procedural
- D. hippocampus; procedural

Question 41

A number of changes take place at the synapse when learning something new. Which of the following is **not** one of these changes?

- A. Dendrites become “bushier”.
- B. The postsynaptic neuron releases an increased amount of glutamate.
- C. Existing synapses are moulded.
- D. New synapses are formed.

Question 42

Which of the following statements is correct regarding adaptive and/or developmental plasticity?

- A. Both adaptive and/or developmental plasticity occur throughout life.
- B. Developmental plasticity consists of five stages. These are proliferation, migration, circuit formation, circuit pruning and myelination.
- C. Developmental plasticity is more evident in the elderly than in the young.
- D. Only developmental plasticity enables rerouting and reorganisation to occur.

Question 43

Katrina has recently given birth to Ayla and is now a mother for the first time. She notices that each time she blows air into Ayla’s eyes, Ayla blinks. The behaviour demonstrated by Ayla is an example of

- A. a fixed action pattern.
- B. maturation.
- C. learning.
- D. a reflex action.

Question 44

Which of the following examples are not dependent on learning?

- A. A spider spinning a web.
- B. Birds flying south for the winter.
- C. Puberty.
- D. All of the above are correct.

Questions 45 – 48 refer to the following information.

Carol was looking after her next door neighbour's dog when they went on holidays for 6 weeks. So that she could take the dog for a walk, her neighbours also left Carol the dog's lead which she hung on the back of the laundry door. Carol noticed that after a few days, every time she walked past the laundry door, the dog became very excited as he knew this meant they were going for a walk.

Question 45

In this scenario, the neutral stimulus is _____ while the unconditioned stimulus is _____.

- A. the laundry door; going for a walk
- B. getting excited; the dog lead
- C. the dog; the laundry door
- D. going for a walk; getting excited

Question 46

In this scenario, the conditioned stimulus is _____ while the conditioned response is _____.

- A. Carol; going for a walk
- B. getting excited; the laundry door
- C. the dog; the laundry door
- D. the laundry door; getting excited

Question 47

After 6 weeks, the neighbours return from their trip and the dog returns home. The neighbour realises that every time she walks past the laundry door the dog gets excited. This is an example of

- A. stimulus discrimination.
- B. a fixed action pattern.
- C. stimulus generalisation.
- D. learning.

Question 48

A few days pass and the dog finally realises that when their owner passes the laundry door, this no longer means that a walk will follow. This process is known as

_____ whereby the _____ no longer elicits the _____.

- A. extinction; unconditioned stimulus; conditioned response
- B. extinction; conditioned stimulus; conditioned response
- C. spontaneous recovery; conditioned stimulus; unconditioned response
- D. spontaneous recovery; unconditioned stimulus; conditioned response

Question 49

Aversion therapy would not work in which of the following situations?

- A. To prevent a person from biting their nails.
- B. To treat a person who had a phobia for spiders.
- C. To treat a person who was an alcoholic.
- D. To prevent a person from gambling at the casino.

Question 50

Matthew has forgotten the passcode to access his mobile phone. He tries a variety of numbers including the year he was born, his birthdate, and the first four digits of his mobile number until finally he figures out that it is his house number. Matthew has worked out his passcode by

- A. luck.
- B. graduated exposure.
- C. persistence.
- D. trial and error.

Questions 51 and 52 refer to the following information.

Jordan is at home on a cold and wet winter's day. She decides to light the fire and as a result starts to feel warm.

Question 51

According to the DBC model of operant conditioning,

- A. lighting the fire is the discriminative stimulus.
- B. being cold is the behaviour.
- C. starting to feel warm is the consequence.
- D. all of the above are correct.

Question 52

In future, Jordan is

- A. less likely to light the fire on a cold day.
- B. more likely to feel warm after a fire is lit.
- C. more/less likely to move to a warmer climate.
- D. more likely to light the fire on a cold day.

Questions 53-55 refer to the following information.

Peter works at K-Mart and is paid \$15 per hour for every hour that he works. Josephine works at a strawberry farm and is paid \$10 for every bucket of strawberries that she picks. They are both trying to earn as much money as possible to save up for their first car.

Question 53

According to schedules of reinforcement, which of the following is correct?

- A. Peter is paid using continuous reinforcement whereas Josephine is being paid using partial reinforcement.
- B. Peter is paid using a fixed ratio schedule whereas Josephine is being paid using a fixed interval schedule.
- C. Peter is paid using a fixed interval schedule whereas Josephine is being paid using a variable ratio schedule.
- D. Peter is paid using a fixed interval schedule whereas Josephine is being paid using a fixed ratio schedule.

Question 54

Who is likely to work at a faster pace?

- A. Peter.
- B. Josephine.
- C. They are both likely to work at the same pace.
- D. It is too difficult to determine this as it depends upon how much they enjoy their job.

Question 55

When Peter was first employed at K-Mart, he underwent a training program so that he could learn to use the registers. This was demonstrated to him by an experienced employee. When the demonstration was happening, Peter watched very closely and remembered the steps involved in how to conduct a transaction with a customer. In terms of observational learning, Peter has played an active role in learning and has met which two key processes?

- A. Attention and motivation.
- B. Retention and reproduction.
- C. Motivation and reinforcement.
- D. Attention and retention.

Question 56

Mary watches the news each morning and is surprised at the number of news items relating to people suffering from mental health issues. She decides to research the prevalence of mental illness in Australia and finds that

- A. <10% of people in Australia will experience a mental illness at some stage in their lives.
- B. 10-20% of people in Australia will experience a mental illness at some stage in their lives.
- C. 30-40% of people in Australia will experience a mental illness at some stage in their lives.
- D. 40-50% of people in Australia will experience a mental illness at some stage in their lives.

Questions 57 and 58 refer to the following information.

Stephanie broke up with her boyfriend a number of months ago. Since this time, she has rarely left the house and instead prefers to communicate with her friends via social media. She lives alone and feels uncomfortable going to the shops. Everything she buys is delivered to her door. She has spoken to her boss about her mental state and he has agreed that Stephanie can now work from home rather than at the office.

Question 57

Which approach to normality best describes Stephanie's situation?

- A. Medical.
- B. Situational.
- C. Functional.
- D. Statistical.

Question 58

Eventually Stephanie seeks assistance from a psychologist who is happy to meet Stephanie in her home. The psychologist asks questions about the break up with her boyfriend, her relationships with her colleagues at work and the friends that she has on social media. According to the biopsychosocial model, the psychologist is focusing on which aspect?

- A. Psychological.
- B. Biological.
- C. Social.
- D. Situational.

Question 59

Which of the following statements is true regarding the ICD and DSM?

- A. ICD stands for "International Classification of Disorders" whereas the DSM stands for the "Diagnostic and Situational Manual of Medical Disorders".
- B. Both the ICD and DSM use the dimensional approach.
- C. The DSM is mainly categorical while the ICD is mainly dimensional.
- D. Both the ICD and DSM use the categorical approach.

Question 60

The biopsychosocial model uses a/an _____ approach in the assessment and management of mental and physical health.

- A. medical
- B. holistic
- C. global
- D. dimensional

Questions 61-63 refer to the following information.

Aaron was planning to study for his Mathematics test. Although maths is very important to him, he has not started revising until the night before the test. He sits down at his desk in his bedroom and as he is about to begin revising, the dog next door starts barking very loudly. Despite his best efforts, Aaron is unable to concentrate and the barking continues into the early hours of the morning. The following day, Aaron arrives at his maths class feeling very stressed as he has been unable to study.

Question 61

Aaron's primary appraisal of this situation would be

- A. challenge.
- B. threat.
- C. harm/loss.
- D. neutral.

Question 62

When Aaron returns home later that day, he is feeling very upset and regretful that he hadn't commenced studying in the days leading up to his examination. He decides to implement both problem-focused and emotion-focused coping strategies. Which of the following are correct examples of problem-focused and emotion-focused coping strategies respectively?

- A. Seeking help from his teacher; dropping mathematics.
- B. Changing subjects to an easier mathematics class; getting a maths tutor.
- C. Creating a study timetable to better manage his time; physical exercise.
- D. Denial; seeking assistance from his older brother who is an excellent mathematician.

Question 63

In the weeks leading up to Aaron's next Mathematics test, he decides to study every night, see his teacher for extra assistance and complete all exercises that have been set for homework. He is looking forward to his next test as he is sure he will perform well. Aaron now appraises the next test as

- A. challenge.
- B. threat.
- C. harm/loss.
- D. neutral.

Question 64

Biofeedback can be used to provide feedback to people relating to a number of physiological measurements. On which of the following physiological measurements does biofeedback generally not provide information?

- A. Respiration.
- B. Heart rate.
- C. Skin temperature.
- D. Muscle strength.

Question 65

Allostasis can be best defined as

- A. maintaining our automatic bodily functions at a state of equilibrium by the parasympathetic nervous system.
- B. maintaining stability through change.
- C. the inability to cope with stressful situations over a long period of time.
- D. a number of stressful events that occur over time which a person can deal with under normal circumstances.

End of Section A

VCE Psychology 2016 Year 12 Trial Exam Units 3/4

SECTION B – Short Answer Questions

Question 1

Explain the location of Broca’s area in terms of its proximity to the primary motor cortex. In your answer, explain the organisation of the primary motor cortex and the role Broca’s area plays in speech.

4 marks

Question 2

Lizzy has been involved in a serious car accident and has sustained brain damage to the posterior region of her right parietal lobe. Name and explain the condition that Lizzy is likely suffering from. In your answer, provide an example of how this condition would affect her everyday life.

3 marks

Question 3

Paul is asleep. While asleep, his content limitations and perception of time are different to when he is awake. Explain how these two characteristics differ during normal waking consciousness and sleep.

2 marks

Question 4

A person with an intact brain is asked to stare at a black dot located in the centre of a screen. An image is projected to either the left or right visual field. As soon as the image is seen, the person must respond by pressing a button with their right hand. Will the person respond quicker when the image is projected to the left or right visual field? Provide an explanation for your answer.

3 marks

Question 5

Explain the difference between sensory memory and short term memory in terms of capacity and duration.

2 marks

Question 6

Joseph suffers from Alzheimer’s disease. As a result, he has increased levels of both amyloid plaques and neurofibrillary tangles. Explain how both amyloid plaques and neurofibrillary tangles contribute to Alzheimer’s disease.

2 marks

Question 7

With reference to Craik and Lockhart’s “Levels of processing theory”, name and explain the difference between the three types of processing.

3 marks

Question 8

Sarah is 43 years old and has decided to move with her 7-year old son Jacob to Paris. Neither Sarah nor Jacob can speak French. In terms of adaptive and developmental plasticity, explain whether Sarah or Jacob will find learning the new language easier.

3 marks

Question 9

With the use of examples, explain the difference between state dependent and context dependent cues.

4 marks

Question 10

Explain the decay theory of forgetting. In your answer, describe the main limitation of this theory.

2 marks

Question 11

Sonia has completed many practise examinations in preparation for her end of year Psychology exam. On each exam, Sonia notices that she performs better in the multiple choice section rather than the short answer section. Explain why.

2 marks

Question 12

Johnson is walking to a friend’s house. He knows that he needs to travel down 5 streets in the order they appear. The names of these streets are Moreton, Oscar, Underwood, Smith and Evergreen. He knows that he can use either an acrostic or an acronym to help remember these street names. Explain the difference between an acrostic and an acronym and provide an example as to how Johnson can use each of these to remember the 5 streets in order.

4 marks

Question 13

There are three different types of recall. List all three, with an explanation of each.

3 marks

Question 14

Explain one difference and one similarity between rerouting and reorganisation.

2 marks

Question 15

Define the term “learning”.

1 mark

Question 16

Explain with the use of Pavlov’s experiment, the difference between extinction and spontaneous recovery.

4 marks

Question 17

With the use of an example for each, explain the difference between punishment and response cost.

4 marks

Question 18

Classical and operant conditioning both involve an acquisition phase. Explain, with the use of an example, how a behaviour can be acquired in both classical and operant conditioning. Correct terminology must be used.

4 marks

Question 19

Quintin has recently been diagnosed with schizophrenia. Since his diagnosis, he has noticed that colleagues at his work treat him differently. In relation to Quintin, explain the difference between labelling and stigma.

2 marks

Question 20

Winning the lotto is generally considered to be a pleasant experience and one which many people throughout the world would like to experience at some stage in their lives. However, some people become rather stressed after winning the lotto and later wish that it had not happened to them. In terms of eustress and distress, explain how this is possible.

2 marks

Question 21

Janine has just finished dinner and is sitting on the couch watching a scary movie. She likes to watch scary movies in darkness so she switches off the lights. Half way through the movie, there is loud banging at her front door. This startles Janine and quickly her fight-flight response is activated. When she opens the front door, she is met by her neighbour who has come to borrow some eggs. Explain the role of both the parasympathetic and sympathetic nervous systems in terms of their effect on digestion when Janine was relaxed and startled.

2 marks

Question 22

What is the difference between allostatic load and allostatic overload?

2 marks

End of Section B

VCE Psychology 2016 Year 12 Trial Exam Units 3/4

SECTION C – Extended Response Questions

Professor Finlay is a lecturer at Winston University. She would like to investigate the effect smoking has on people’s perception of taste. She decides to use all 60 of her first year Psychology students in her investigation. All students are non-smokers as they had not smoked any cigarettes in the past 12 months. Thirty of the students who had their tutorial class on a Monday were placed into Group A and the other thirty students who had their tutorial class on a Tuesday were placed in group B. There was an even distribution of male and female students in both groups.

All participants wanted to participate in the study as Professor Finlay promised to give each student extra credit for the subject. Informed consent procedures were fully met.

Sixty large water jugs (1 per participant) containing 5 litres of water were placed in the quadrangle at the university. Each student was required to dip a cup into the jug and take a small sip of water. One teaspoon of sugar was then dissolved into the water and students were asked to take another sip. All 30 students in Group A and 28 students in Group B were able to taste the difference and detect that sugar had been added.

Students in Group B were then given one cigarette and instructed to smoke. Once the cigarettes had been smoked, students in Groups A and B were asked once again to take a sip of water and determine whether or not they could taste the sugar. The results of this second condition are as follows:

	% of students who could detect sugar in 5 litres of water
Group A	100%
Group B	70%

Question 1

Was random allocation used? Explain.

2 marks

Question 2

Write an aim for this investigation.

1 mark

Suggested Answers

VCE Psychology 2016 Year 12 Trial Exam Units 3/4

SECTION A – Multiple Choice Answers

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

SECTION B – Short Answer (Answers)

Question 1

Broca's area is located in the left frontal lobe (**1 mark**) in close proximity to the primary motor cortex. The primary motor cortex is organised in such a way that body parts which are located lower on the body are represented higher on the primary motor cortex and vice versa (**1 mark**). Therefore, the mouth which is high on the body is located low on the primary motor cortex near Broca's area (**1 mark**). Broca's area works with the primary motor cortex in moving the muscles of the mouth, lips and tongue in the production of articulate speech (**1 mark**).

Question 2

Lizzy is likely to be suffering from spatial neglect (or neglect syndrome) (**1 mark**). This is an attentional disorder whereby the sufferer fails to pay attention to the left side of their world (**1 mark**). Lizzy may only eat food on the right hand side of her plate (**1 mark** for a similar example).

Question 3

When asleep, Paul will have fewer content limitations meaning that he has less control over the thoughts that enter his mind compared to when he is in normal waking consciousness (**1 mark**). When asleep, Paul will experience a distorted perception of time. Therefore, when he wakes from his sleep he will not be able to accurately determine how much time has passed compared to when he is in normal waking consciousness (**1 mark**).

Question 4

The person will respond quicker when the image is projected to the right visual field (**1 mark**). This is because the image will be processed in the left hemisphere (primary motor cortex) which is responsible for movement of the right hand (**1 mark**). When the image is projected to the left visual field it is processed in the right hemisphere and will need to cross over the corpus callosum to the left hemisphere to move the right hand which takes more time (**1 mark**).

Question 5

Sensory memory has an unlimited capacity whereas short term memory has a capacity of 7 ± 2 bits of information (**1 mark**). Sensory memory has a duration of 3-4 seconds (echoic) whereas short term memory has a duration of 30 seconds (**1 mark**).

Question 6

Amyloid plaques are proteins that form along the axon terminals which interfere with communication between neurons (**1 mark**). Neurofibrillary tangles are a build-up of protein within the neuron which leads to the death of brain cells (**1 mark**).

Question 7

According to Craik and Lockhart, information can be processed in three different ways.

- i. Structurally, whereby information is processed in terms of how it looks (**1 mark**).
- ii. Phonemically, whereby information is processed in terms of how it sounds (**1 mark**).
- iii. Semantically, whereby information is processed in terms of its meaning (**1 mark**).

Question 8

Jacob will find it easier to learn French than Sarah (**1 mark**). Jacob is experiencing both adaptive and developmental plasticity (**1 mark**) whereas Sarah is experiencing only adaptive plasticity (**1 mark**).

Question 9

State dependent cues occur when the person's internal environment (physiological/psychological state) when learning the information is the same as when they are trying to retrieve the information. The internal environment acts as a retrieval cue (**1 mark**). For example, Teresa is happy during every one of her psychology classes this year. She is more likely to retrieve the information during an exam if she is also happy (**1 mark** for a similar example).

Context dependent cues occur when the person's external environment (the context) when learning the information is the same as when they are trying to retrieve the information. The external environment acts as a retrieval cue (**1 mark**). For example, Teresa's psychology class has been conducted in the same classroom all year. Therefore, she is more likely to be able to recall information relating to psychology when inside this classroom (**1 mark** for a similar example).

Question 10

The decay theory states that memory traces are likely to fade due to disuse over time (**1 mark**). The main limitation of this theory is that it does not explain why older memories can sometimes be recalled more easily than more recent memories (**1 mark**).

Question 11

The multiple choice section uses recognition whereas the short answer section uses recall (**1 mark**). Recognition is a more sensitive measure of retention than recall which enables Sonia to score better on the multiple choice section (**1 mark**).

Question 12

An acrostic is when the first letter of each word needed to be remembered is used to create another word which forms a phrase, rhyme or poem (**1 mark**). For example, Johnson could use the first letter of each street name to create the following acrostic – “Many occupants use solar energy” (**1 mark** for a similar example).

An acronym is when the first letter of each word is used in order to create a new pronounceable word (**1 mark**). For example, Johnson could create the acronym – MOUSE (**1 mark**).

Question 13

Free Recall – This type of recall requires the person to retrieve information in any order without any retrieval cues – for example, remembering the 18 AFL teams in any order and without cues (**1 mark**).

Serial recall – This type of recall requires the person to retrieve information in the order in which it is presented – for example, the 18 AFL teams in ladder order (**1 mark**).

Cued Recall - This type of recall requires the person to retrieve information with the use of retrieval cues – for example, the first letter of each word is given when trying to remember the 18 AFL teams (**1 mark**).

Question 14

Similarity. Either of the following for (**1 mark**).

- Both occur as a result of adaptive plasticity
- Both can occur as a result of brain injury

Difference.

- Rerouting occurs when the neural transmission “detours” around the damaged area of the brain whereas reorganisation occurs when a different part of the brain takes over the function of the damaged area (**1 mark**).

Question 15

Learning is a relatively permanent change in behaviour due to experience (**1 mark**).

Question 16

Extinction occurs when the conditioned stimulus no longer elicits the conditioned response (**1 mark**). For example, in Pavlov’s experiment, extinction occurred when the bell (conditioned stimulus) no longer caused the dog to salivate (conditioned response) (**1 mark**), whereas spontaneous recovery occurs when, after a period of extinction, the conditioned stimulus once again elicits the conditioned response (**1 mark**). In Pavlov’s experiment, the dog salivated to the sound of the bell after extinction had occurred (**1 mark**).

Question 17

Punishment occurs when a behaviour is followed by a negative consequence. Usually, the negative consequence is “given” to the person who has performed an undesirable behaviour (**1 mark**). For example, a smack is “given” to a child who has been misbehaving (**1 mark** for a similar example).

Response cost is a form of punishment whereby something positive is “taken away” from a person who has performed an undesirable behaviour (**1 mark**). For example, a child has his mobile phone taken away for not completing his homework (**1 mark** for a similar example).

Question 18

Classical Conditioning – During the acquisition phase, there is a repeated association between the Neutral Stimulus (NS) and the Unconditioned Stimulus (UCS) (**1 mark**). For example, in Pavlov’s experiment, the acquisition phase occurred when there was continual pairing of the bell (NS) and the meat powder (UCS) (**1 mark**).

Operant Conditioning – During the acquisition phase, desirable behaviour (B) is reinforced with a pleasant consequence (C) (**1 mark**). For example, a student completes their homework (B) and is reinforced with praise (C) (**1 mark**).

Please note, Operant Conditioning can also be used to decrease the likelihood of an undesirable behaviour occurring again. In this case, students may explain that the acquisition phase involves a student not completing their homework (B) and therefore they are punished with a detention (C).

Question 19

When a person is diagnosed as having a mental illness this “labels” them as having this condition. In this case, Quintin has been labelled as having schizophrenia (**1 mark**). As a result of being labelled, people may develop a stigma and therefore treat the person differently. In this case, Quintin’s colleagues are treating him differently as he has schizophrenia (**1 mark**).

Question 20

Stress is considered to be subjective, meaning that a given situation (stressor) can have different consequences for different people (**1 mark**). Therefore, when some people win the lotto they experience eustress and have a positive psychological response whereas others experience distress and have a negative psychological response (**1 mark**).

Question 21

When Janine was originally relaxed (and when she realised it was only her neighbour knocking on the front door), the parasympathetic nervous system would have dominated and therefore digestion would have been stimulated and she would be digesting her dinner (**1 mark**). When there was banging at the door, Janine’s sympathetic nervous system would have been activated and her digestion would have been inhibited or slowed (**1 mark**).

Question 22

Allostatic load refers to the summative effect of stressful events that occur to a person over a period of time (**1 mark**). When the demands of these stressors exceed a person’s resources and ability to cope then a person is said to have entered allostatic overload (**1 mark**).

SECTION C – Extended Response Answers

Question 1

Random allocation was not used (**1 mark**). This is because not all members of the sample had an equal chance of being chosen for either the control or experimental group. Instead, these groups were determined by the day of the week when their tutorial class was conducted (**1 mark**).

Question 2

To determine the effect of smoking on the perception of taste (**1 mark**).

Question 3

Professor Finlay used an Independent Groups Design (**1 mark**). The main limitation of using this design is that it does not eliminate participant related variables (**1 mark**).

Question 4

Hypothesis – It is predicted that people who smoke will have a reduced perception of taste compared to those people who do not smoke (**2 marks**).

Independent variable – smoking; operationalised as one cigarette (**1 mark**).

Dependent variable – taste perception; operationalised as the ability to detect 1 teaspoon of sugar in 5 litres of water (**1 mark**).

Either of the following for (**2 marks**) each:

- A matched participant design could have been used by Professor Finlay. Students would have been matched based on characteristics relevant to the study, for example, taste perception. This would eliminate many of the participant related variables caused by the independent groups design.
- A repeated measures design could be used where all participants were required to experience both the control condition and the experimental condition. Therefore, all participants would be required to smoke a cigarette. This would eliminate all participant related variables. Please note, counterbalancing should also be used with this study design to eliminate the order effect.

The ethical principle of voluntary participation was not adhered to. Students felt compelled to participate in the investigation as they would receive extra credit from Professor Finlay (**1 mark**). To ensure that informed consent was adhered to, Professor Finlay would need to give all participants (and their parents if under the age of 18) all information relating to the investigation including the nature, purpose and possible harm that may be caused. Students would need to sign the consent form and so too would parents of students under the age of 18 (**1 mark**).

Answer continued overleaf.

Questions 4 (Continued)

There are a number of extraneous variables that are evident in this investigation. Students could choose any of the following (and others that are similar) with an explanation as to how it can be improved in future for **(2 marks)**.

Random allocation did not occur. In future, students' names should be placed in a hat and picked "at random" to be in either the control or experimental condition.

Differences in taste buds were not taken into account. In future, either a matched participant or repeated measures design should be used.

Smoking can affect people's taste buds differently. In future, either a matched participant or repeated measures design should be used.

Food that students ate for breakfast can also have an effect on taste buds. In future, all students should consume the same breakfast (or none at all) prior to the investigation.

End of Suggested Answers