VCE PSYCHOLOGY 2015
YEAR 12 TRIAL EXAM

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Units 3/4
Reading time: 15 minutes
Writing time: 2 hours 30 minutes

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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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# VCE Psychology 2015 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.

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VCE Psychology 2015 Year 12 Trial Exam Units 3/4

SECTION A – Multiple Choice Questions

Question 1
Marlaena is walking to the shops. On the way, she is thinking about the items she needs to buy while at the same time is aware of the traffic that is passing her. As she is aware of her internal thoughts and feelings and also her external environment, Marlaena is most likely experiencing
A. an altered state of consciousness.
B. a daydream.
C. normal waking consciousness.
D. selective attention.

Question 2
Brandon is asleep and is dreaming. In the dream, Brandon is running through a field while a clown is juggling four chickens under the shade of a tree. While dreaming, Brandon is considered to be in an altered state of consciousness because
A. his content limitations are more limited.
B. his body is motionless.
C. his content limitations are less limited.
D. he has more self-control.

Question 3
Taylor is connected to an EEG. She is wide awake and alert. The brain wave patterns as shown on the EEG would be
A. high in amplitude and low in frequency.
B. high in frequency and low in amplitude.
C. high in both amplitude and frequency.
D. low in both amplitude and frequency.

Question 4
Maddison is daydreaming in class. While daydreaming, Maddison is experiencing an altered state of consciousness because
A. time will either speed up or slow down.
B. Maddison will have an increased level of awareness as her attention changes from her surrounding environment to her internal thoughts, feelings and emotions.
C. Maddison will experience changes in self-control and she will have greater control of her behaviour.
D. Maddison may experience perceptual distortions whereby her pain threshold may increase, therefore causing Maddison to feel less pain.

Question 5
Which of the following statements is true regarding alcohol?
A. Alcohol is a psychoactive drug that is characterised as a depressant.
B. Alcohol is a proactive drug that is characterised as a stimulant.
C. Alcohol is a psychoactive drug that is characterised as a stimulant.
D. Alcohol is a proactive drug that is characterised as a depressant.
Question 6
Which of the following statements regarding REM sleep is incorrect?
A. On average, a person will experience five REM cycles per night.
B. REM cycles become longer and occur closer together as the night progresses.
C. An EOG reading will show low levels of electrical activity during REM.
D. The proportion of time spent in REM decreases as a person ages.

Question 7
Tyson has just woken from a full night’s sleep whereby he slept for a total of 7.5 hours. Which of the following statements regarding his night’s sleep is correct?
A. Tyson will experience stage 4 NREM sleep for the first 4 cycles of the night, however will not experience stage 4 NREM during the fifth cycle.
B. Each of the five cycles that Tyson experienced would last for approximately 60 minutes.
C. When in stage 4 of NREM sleep, Tyson would be difficult to wake, and if woken, he would appear groggy and disorientated.
D. While experiencing REM sleep, the small muscles in Tyson’s face would be tense, especially while dreaming.

Question 8
Both the survival and restorative theories of sleep aim to explain the reasons why sleep is required. Which of the following is a limitation of the survival theory of sleep?
A. The survival theory of sleep fails to explain why a person requires both REM and NREM sleep.
B. The survival theory of sleep fails to explain how an animal is less vulnerable from predators while sleeping.
C. The survival theory of sleep fails to explain how memories are consolidated while sleeping.
D. The survival theory of sleep fails to explain why animals such as cows sleep for less time than other animals as they require more time to find food to survive.

Question 9
Jordan is a seventeen year old student. During this stage of the lifespan, Jordan’s sleep patterns and secretion of hormones will differ from children and adults. When comparing Jordan with other stages of the lifespan Jordan will
A. require more sleep than adults, less sleep than children and spend more time in REM sleep than babies.
B. secrete the hormone melatonin approximately two hours later than adults and the hormone cortisol approximately two hours earlier than adults.
C. require approximately 10 hours of sleep per night and 50% of the time spent asleep will be in REM sleep.
D. spend more time in NREM sleep than REM sleep, have a delayed release of melatonin compared to adults and require less sleep than babies.
**Question 10**
NREM stage 3 and NREM stage 4 are similar, yet they can be differentiated. Which of the following statements is true in differentiating these two stages of sleep?
A. NREM stage 3 is considered light sleep, whereas NREM stage 4 is considered deep sleep.
B. NREM stage 3 is represented by a mixture of beta and alpha waves, whereas NREM stage 4 is represented by a mixture of theta and delta waves.
C. NREM stage 3 is characterised by hypnic jerks, whereas NREM stage 4 is characterised by the hypnogogic state.
D. NREM stage 3 contains more theta than delta waves, whereas NREM stage 4 contains more delta than theta waves.

**Questions 11, 12 and 13 refer to the following information.**
Namarta has been asked to speak in assembly. While she is sitting in the audience awaiting her turn, she is feeling very nervous and quite scared at the prospect of speaking. During this time, she notices a number of physiological changes taking place within her body. Once she has completed her speech, Namarta returns to her seat and notices that the physiological changes that took place are starting to return to normal.

**Question 11**
Which nervous system was responsible for the physiological changes that were occurring while Namarta was waiting to speak?
A. Peripheral Nervous System.
B. Sympathetic Nervous System.
C. Autonomic Nervous System.
D. Parasympathetic Nervous System.

**Question 12**
Which of the following changes would Namarta have experienced while waiting to speak?
A. Increased respiration, increased perspiration, decreased production of saliva and a decrease in digestion.
B. Constriction of pupils, dilation of bronchi, stimulation of intestines and relaxation of the bladder.
C. Increased respiration, increased perspiration, increased production of saliva and a decrease in digestion.
D. Constriction of pupils, dilation of bronchi, stimulation of intestines and contraction of the bladder.

**Question 13**
Which nervous system was responsible for the physiological changes that occurred when Namarta returned to her seat?
A. Peripheral Nervous System.
B. Sympathetic Nervous System.
C. Autonomic Nervous System.
D. Parasympathetic Nervous System.
Question 14
Which of the following is correct regarding the organisation of the primary motor cortex?

A. The primary motor cortex on the right hemisphere is responsible for movement of the right side of the body and vice versa.
B. The primary motor cortex is “contralateral” in its organisation.
C. Body parts that are more sensitive are allocated a greater area on the primary motor cortex than those body parts that are less sensitive.
D. Body parts located closer to the head are located higher on the primary motor cortex and those body parts closer to the feet are located lower on the primary motor cortex.

Question 15
Madeleine has damaged Wernicke’s area. As a result, she struggles to hold a conversation. When conversing with others, many people cannot understand what Madeleine is trying to say. This is because

A. Madeleine can only use nouns and verbs in her speech and therefore makes little sense.
B. Madeleine stutters when speaking as she tries to locate the correct words from memory to express a particular meaning.
C. Madeleine speaks fluently, yet her speech is nonsensical.
D. Madeleine has difficulty in comprehending language.

Question 16
Joshua is a split brain patient. A picture of an apple is projected onto a screen. Joshua is asked to close his right eye and view the image with his left eye only. The picture of the apple would be first registered in which lobe(s)?

A. Both the left and right occipital lobes.
B. The right occipital lobe.
C. The left occipital lobe.
D. Joshua would be unable to see this picture as he is a split brain patient.

Question 17
Michaela has a condition whereby she fails to recognise and pay attention to the left side of her world. The part of the brain that Michaela has most likely sustained damage is

A. posterior region of the left parietal lobe.
B. posterior region of the right parietal lobe.
C. anterior region of the left parietal lobe.
D. anterior region of the right parietal lobe.
**Question 18**
Which of the following statements is correct for a person with an intact brain?

A. The person will take slightly longer to verbally respond to information that is projected to their left visual field when compared to information that is projected to their right visual field.

B. The person will take less time to verbally respond to information that is projected to their left visual field when compared to information that is projected to their right visual field.

C. The person will take slightly longer to verbally respond to information that is projected to their right visual field when compared to information that is projected to their left visual field.

D. When information is presented to their right visual field, they will be able to verbally describe what they have seen, however when information is presented to the left visual field they will be unable to verbally describe what they have seen.

**Question 19**
Rhiannon remembers how to ride a bike, Penny can remember the first time she bought a bike, while Brandon can remember that a bike consists of two wheels, a chain, handle bars and a frame. Respectively, the different types of long term memory as demonstrated by Rhiannon, Penny and Brandon are

A. episodic, semantic and procedural.

B. declarative, procedural, semantic.

C. procedural, episodic, semantic.

D. procedural, semantic, episodic.

**Question 20**
Monica has recently changed jobs. Friends often ask for her new work number. Unfortunately, Monica accidentally provides the phone number of the previous workplace. This is an example of

A. retrograde interference.

B. proactive interference.

C. retroactive interference.

D. anterograde interference.

**Question 21**
Which of the following statements is true regarding sensory memory and short term memory?

A. Information received in sensory memory will always be transferred to short term memory.

B. Information in sensory memory is in its “raw” form as it is yet to be encoded, whereas information in short term memory has been encoded and is therefore no longer in its “raw” form.

C. Short term memory and sensory memory both have an unlimited capacity.

D. Sensory memory and short term memory both have one entry point.
Question 22
Chloe is trying to remember the four lobes of the brain. She has learnt in her psychology class that elaborative rehearsal is better for remembering information than maintenance rehearsal. Which of the following is an example of elaborative rehearsal that Chloe could use to remember the four lobes of the brain?
A. Chloe could continually repeat the names of the four lobes over and over again.
B. Chloe could cut out a picture of each of the lobes and continually shuffle the pictures in her hand.
C. Chloe could ask her mother to repeat the names of each lobe out loud.
D. Chloe could remember the names of each lobe by linking them to information already stored in long term memory.

Questions 23-26 refer to the following information.
Mr Johnson has asked his students to listen as he reads out a list of 15 unrelated words. The students are instructed to wait until Mr Johnson has finished reading the list before writing down as many words as possible.

Question 23
If the students commence writing as soon as Mr Johnson completes reading the word list, which of the following statements is most likely to reflect the results obtained by the class?
A. Students are more likely to remember the words at the beginning of the list, followed by words at the end of the list and then words in the middle of the list.
B. Students are more likely to remember words at the end of the list, known as the primacy effect, followed by words at the beginning of the list, known as the recency effect.
C. Students are more likely to remember words at the beginning of the list than words in the middle of the list.
D. Students are likely to remember words at the beginning and end of the list equally.

Question 24
In addition to this task, Mr Johnson reads out another list with 15 different words. This time, students are asked to wait 45 seconds before writing down the words they remember. Which of the following statements is likely to reflect these results?
A. Words at the start of the list are likely to be remembered better than words at the end of the list, as words at the start of the list have been committed to short-term memory.
B. Words in the middle of the list will be remembered better than words at the start of the list.
C. Words at the end of the list are more likely to be remembered than words at the start of the list, followed by words in the middle of the list.
D. Words at the end of the list are less likely to be remembered compared to words at the start of the list.

Question 25
When completing the second task, some students accidentally wrote words from the first list. These students have experienced
A. proactive interference.
B. retroactive interference.
C. retrograde interference.
D. primacy interference.
Question 26
At the conclusion of the class activity, Mr Johnson placed the names of the students and their results in the staff room. Which ethical guideline has Mr Johnson breached by doing this?
A. Withdrawal rights.
B. Voluntary participation.
C. Confidentiality.
D. Informed consent.

Question 27
Sensory memory consists of both iconic and echoic memory. Which of the following statements is true regarding iconic and echoic memory?
A. Both iconic and echoic memory have an unlimited capacity and an unlimited duration.
B. Iconic memory is our auditory sensory memory, while echoic memory is our visual sensory memory.
C. Information in iconic memory is automatically transferred to short term memory, whereas attention must be paid to information in echoic memory for it to be transferred to short term memory.
D. Iconic memory is our visual memory system and has an unlimited capacity, whereas echoic memory is our auditory memory system and has a limited duration.

Question 28
Marcus would like to rearrange the furniture in his bedroom. In his mind he imagines what it would look like if he moved his bed underneath the window and shifted his chest of drawers closer to the bedroom door. When imagining his room, Marcus is using the _______________ component of his working memory. Marcus then realises that he can fit a double bed into his bedroom. The decision to buy a new double bed and discard his single bed has been made by the _______________ component of his working memory.
A. visuo-spatial sketchpad; central executive
B. central executive; phonological loop
C. visuo-spatial sketchpad; episodic buffer
D. episodic buffer; central executive

Question 29
The amygdala is responsible for the formation of ______________ memories, whereas the hippocampus is responsible for ______________ memories.
A. procedural; emotional
B. emotional; explicit
C. declarative; implicit
D. implicit; explicit
Question 30
Margaret is a healthy 85 year old woman. Although her memory is quite good for tasks such as dressing herself, cooking and knitting, she struggles to remember phone numbers and sometimes forgets recent news events. Which of the following is the most likely reason for Margaret’s inability to remember phone numbers and recent news events?
A. Motivated forgetting.
B. Lack of confidence in remembering.
C. Alzheimer’s disease.
D. Amnesia.

Question 31
Which of the following statements is true regarding retrograde amnesia?
A. People who suffer from retrograde amnesia fail to remember events that occur after the onset of their condition.
B. People who recover from retrograde amnesia will most likely restore their memories in chronological order; in other words, older memories are recovered first.
C. Strokes and head injuries are the only known causes of retrograde amnesia.
D. When a person has retrograde amnesia as a result of a head injury, the 30 minutes prior to the injury is always remembered.

Question 32
Sarah is sitting in her Year Twelve Further Maths class. Her teacher has asked her to complete a mathematics sum. Sarah calculates the answer and commits this answer to her long-term memory. According to Baddeley and Hitch’s model of working memory, which of the following statements is correct?
A. When calculating the sum, Sarah was using her visuo-spatial sketchpad. When committing the answer to her long-term memory, Sarah was using her episodic buffer.
B. When Sarah was visualising the sum, she was using the visuo-spatial sketchpad. When she was saying aloud her answer to the teacher, she was using her episodic buffer.
C. When listening to her teacher asking her to complete the mathematics sum, Sarah was using her phonological loop. When committing the answer to her long-term memory, Sarah was using her episodic buffer.
D. When Sarah was visualising the sum, she was using the phonological loop. When she was saying aloud her answer to the teacher, she was using her episodic buffer.

Question 33
Susan decided to replicate Hermann Ebbinghaus’ “Forgetting Curve” experiment. In doing so, she memorised a list of nonsense syllables and then tested herself for various periods of time to determine what percentage of the material had been retained. Susan found her results were the same as Ebbinghaus’. Which of the following statements is incorrect regarding either Susan’s experiment or the results she obtained?
A. When Susan tested herself, the various periods of time ranged from 20 minutes to 31 days.
B. Nonsense syllables that Susan used would have been pronounceable 3 letter “words” that are not recognisable words.
C. Susan’s results would indicate that approximately 75% of the nonsense syllables were forgotten within the first hour.
D. If Susan were to graph her results, she would find that the rate of forgetting would be steep initially, however would be gradual towards the latter stages of the experiment.
**Question 34**
Nicole has been in a good mood during all of her Year Twelve Psychology classes this year. She loves the subject and thinks her teacher is terrific. She has performed very well on all tests. On the day of her end of year exam, she has an argument with her mother in the car on the way to school, putting her in a bad mood. When Nicole sits her exam she struggles to recall some information. According to retrieval failure theory, Nicole’s inability to remember is due to
A. a lack of state dependent cues.
B. tip of the tongue phenomenon.
C. interference theory.
D. a lack of context dependent cues.

**Question 35**
Research into forgetting suggests that there are two different types of motivated forgetting. These are
A. suppression and regression.
B. regression and repression.
C. succession and repression.
D. repression and suppression.

**Question 36**
Mary is trying to remember that sensory neurons are also referred to as afferent neurons, while motor neurons are also known as efferent neurons. To help her remember, Mary uses the following word—SAME (sensory afferent motor efferent). The word SAME is an example of a/an
A. acrostic.
B. acronym.
C. recall cue.
D. context dependent cue.

**Question 37**
Josephine has a 6 month old daughter. She is tired of picking up her daughter and carrying her everywhere. It is beginning to hurt her back and she can’t wait for her daughter to start walking. To encourage her daughter to walk, Josephine puts her hands under her daughter’s armpits and steadies her while she takes little steps around the house. After two weeks of trying this, Josephine is likely to notice which of the following?
A. Her daughter is likely to walk by herself as she has now experienced walking. This is known as experience expectant learning.
B. Her daughter will be unable to walk by herself. This is because walking for her daughter has not yet become a fixed action pattern.
C. Her daughter will be unable to walk for herself as her body is not developed enough. This is due to a lack of maturation.
D. Her daughter is likely to walk for herself as the help from Josephine would have quickened the maturation process.
Question 38
Michael was cleaning out his guttering when he slipped and fell, causing serious head injuries. Since the accident, Michael has not been able to show any signs of a typical fear response when confronted with a new unpleasant stimulus. The part of Michael’s brain most likely to be damaged is the
A. amygdala.
B. hippocampus.
C. cerebral cortex.
D. ventral tegmental area.

Question 39
Which of the following statements is true regarding the learning process?
A. Glutamate is released from the axon terminals of the post-synaptic neuron to the dendrites of the pre-synaptic neuron.
B. Glutamate is released from the axon terminals of the pre-synaptic neuron to the dendrites of the post-synaptic neuron.
C. Glutamate is released from the dendrites of the post-synaptic neuron to the axon terminals of the pre-synaptic neuron.
D. Glutamate is released from the dendrites of the pre-synaptic neuron to the axon terminals of the post-synaptic neuron.

Question 40
Which of the following statements regarding adaptive plasticity is incorrect?
A. Adaptive plasticity can occur as a result of learning and experiences.
B. Adaptive plasticity can occur throughout the lifespan.
C. Adaptive plasticity is more evident in the elderly than in young children as they have been exposed to more experiences throughout their lives.
D. Adaptive plasticity can occur after a person has sustained a head injury.

Question 41
In Pavlov’s original experiments, the dog salivated to the sound of a bell and also to the sound of a tuning fork and a metronome. This demonstrates
A. stimulus discrimination.
B. response discrimination.
C. stimulus generalisation.
D. response generalisation.
Questions 42 – 44 refer to the following information.
Maxwell is using classical conditioning to train his pet rabbit to blink each time a puff of air is blown into its eyes. In doing so, Maxwell sounds a horn, then blows air into the eyes of his rabbit. After several associations, the rabbit learns to blink at the sound of the horn.

**Question 42**
In this scenario, initially (before learning has taken place) the puff of air is known as the __________ whereas the rabbit blinking is known as the __________.
A. neutral stimulus; unconditioned response
B. unconditioned stimulus; unconditioned response
C. conditioned stimulus; conditioned response
D. unconditioned stimulus; conditioned response

**Question 43**
Once learning has taken place, the horn is now referred to as the __________ whereas the puff of air would be the __________.
A. neutral stimulus; conditioned response
B. conditioned stimulus; neutral stimulus
C. unconditioned stimulus; unconditioned response
D. conditioned stimulus; unconditioned stimulus

**Question 44**
Eventually, extinction occurs. This would mean that
A. Maxwell has stopped blowing a puff of air in the rabbit’s eye and therefore the horn no longer causes the rabbit to blink.
B. Maxwell has stopped sounding the horn and therefore the rabbit no longer blinks.
C. Maxwell stops sounding the horn and blowing air into the rabbit’s eyes and therefore the rabbit no longer blinks.
D. the rabbit continues to blink in the absence of the horn.
Questions 45 and 46 refer to the following information.
Matthew has been given a piano for his thirteenth birthday. He sits at the piano each day and practises for at least two hours. At the end of each practise, his mother praises him for his efforts.

**Question 45**
aka. ABC model
According to the DBC model of operant conditioning, which of the following is correct regarding the discriminative stimulus, the behaviour and the consequence in this scenario?

A. The discriminative stimulus is Matthew playing the piano, the behaviour is Matthew being praised by his mother, and the consequence is the piano that has been given for Matthew’s birthday.

B. The discriminative stimulus is Matthew being praised by his mother, the behaviour is Matthew playing the piano, and the consequence is the piano that has been given for Matthew’s birthday.

C. The discriminative stimulus is Matthew playing the piano, the behaviour is Matthew being given the piano for his birthday, and the consequence is Matthew being praised by his mother.

D. The discriminative stimulus is the piano that has been given for Matthew’s birthday, the behaviour is Matthew playing the piano, and the consequence is Matthew being praised by his mother.

**Question 46**
Matthew’s four year old sister Alysa would also like to learn how to play the piano. She asks Matthew to teach her. Unfortunately, she lacks hand eye coordination and her feet can’t reach the piano pedals. Which key process in observational learning is preventing Alysa from playing the piano successfully?

A. Reproduction.

B. Motivation.

C. Attention.

D. Retention.
Questions 47 and 48 refer to the following information.
Mr Newman is a Grade 4 teacher. Jake is a student in his class who is very disruptive to other children. On Monday, Jake is disruptive so Mr Newman moves Jake to an area of the classroom away from his friends. On Tuesday, Jake behaves well and Mr Newman praises Jake for his improved behaviour.

Question 47
On Monday, Mr Newman used _______________________, while on Tuesday, Mr Newman used ____________________.
A. positive reinforcement; punishment
B. negative reinforcement; positive reinforcement
C. punishment; positive reinforcement
D. punishment; response cost

Question 48
Mr Newman creates a sticker chart which he places on the wall of the classroom. Each day that Jake is well behaved, Mr Newman puts a sticker on the chart. If, by the end of the week, Jake has 5 stickers on his chart then he is allowed free time on the classroom computer. In this example, Mr Newman is using
A. shaping.
B. positive reinforcement.
C. behaviour modification.
D. a token economy.

Question 49
Which of the following statements accurately describes the similarity between positive reinforcement and negative reinforcement?
A. Both positive reinforcement and negative reinforcement increase the likelihood that a desired behaviour will occur again.
B. Both positive reinforcement and negative reinforcement increase the likelihood that an undesirable response will occur again.
C. Both positive reinforcement and negative reinforcement are forms of punishment.
D. Both positive reinforcement and negative reinforcement involve rewarding an individual with a desirable consequence.

Question 50
Over the Christmas holidays, Jamie had not used the combination lock on his school locker for approximately six weeks. When he returned to school, he found it difficult to remember his combination. After a number of unsuccessful attempts, Jamie finally managed to open his locker. In this example, Jamie has exhibited
A. the practise effect.
B. trial and error learning.
C. the method of successive approximations.
D. positive reinforcement.
Questions 51 – 53 refer to the following information.
Margaret and Henry are both about to skydive for the very first time. Margaret, although nervous, is looking forward to the challenge and can’t wait to jump. Henry on the other hand is concerned that his parachute won’t open and he is dreading the thought of jumping.

Question 51
In this scenario, Margaret is likely to be experiencing ______________ whereas Henry is likely to be experiencing ________________.
A. distress; eustress  
B. distress; distress  
C. eustress; distress  
D. eustress; eustress  

Question 52
The physiological responses experienced by Margaret and Henry would be
A. Margaret would experience an increase in her heart rate, increase in breathing rate and an increase in sweat production. Henry would experience a decreased heart rate, a decrease in breathing rate and a decrease in sweat production.  
B. Margaret would experience a decrease in her heart rate, a decrease in breathing rate and a decrease in sweat production. Henry would experience an increase in heart rate, increase in breathing rate and an increase in sweat production.  
C. Margaret would experience an increase in heart rate and an increase in the production of saliva. Henry would experience stimulation of his digestive system and dilated pupils.  
D. both Henry and Margaret would experience similar physiological responses as they are both experiencing stress.  

Question 53
Although Margaret and Henry are experiencing the same situation, they have appraised the situation differently. This supports the notion that stress is
A. objective.  
B. qualitative.  
C. subjective.  
D. quantitative.  

Question 54
The frequent activation of the fight-flight response has a cumulative effect. When the response is triggered repeatedly over a long period of time and the person is depleted of their resources to cope, they are said to be experiencing
A. homeostasis.  
B. allostatic overload.  
C. allostatic load.  
D. allostasis.
Question 55
Geoffrey is currently experiencing stress due to extra demands at work that have been placed on him by his boss. A friend recommends that Geoffrey visits a psychologist. The psychologist connects Geoffrey to an electrocardiogram while at the same time Geoffrey is taught to lower his heart rate using relaxation techniques. Geoffrey is using
A. stress reduction therapy.
B. biofeedback.
C. physiological response therapy.
D. cognitive behavioural therapy.

Question 56
Physical exercise is considered an excellent way of reducing stress. Which of the following is **not** a benefit of physical exercise?
A. Physical exercise can lead to feelings of calmness.
B. Physical exercise helps to return the body to homeostasis more quickly.
C. Physical exercise decreases the production of endorphins which helps to improve a person’s mood.
D. Physical exercise helps to reduce the strength of a person’s physical reaction to stress.

Question 57
Mental health can be best described as
A. a state of emotional and social well-being in which individuals can realise their own abilities, can cope with the normal stresses of life, can work productively and can contribute to their community.
B. a disorder that affects one or more functions of the mind. It can interfere with a person’s thoughts, emotions, perceptions and behaviours.
C. a state of emotional and social well-being in which individuals can’t realise their own abilities, can’t cope with the normal stresses of life, but can work productively and contribute to their community.
D. a pattern of thoughts, feelings or behaviour that conforms to a usual, typical or expected standard.

Question 58
The categorical approach uses two manuals to classify mental disorders. These manuals are known as
A. The International Classification of Mental Disorders (ICDM) and the Diagnostic Manual of Mental Disorders (DMMD);
B. The Diagnostic and Statistical Manual of Mental Disorders (DSM) and the International Classification of Diseases (ICD);
C. The International Categorisation of Mental Disorders (ICDM) and the Diagnostic Manual of Mental Disorders (DMMD);
D. The Diagnostic and Statistical Manual of Mental Disorders (DSM) and the International Categorisation of Diseases (ICD);
Questions 59 and 60 refer to the following information.
Alex and David both travel one hour to work each morning. They are both feeling stressed with this travel time due to the impact it is having on their family. As a result, Alex has decided to change jobs so that he works closer to home. David on the other hand has decided to meditate each day when he gets home from work to alleviate some of the stress the travel is causing.

Question 59
In this example, Alex is using
A. emotional forecasting.
B. problem-focused coping.
C. emotion-focused coping.
D. problem forecasting.

Question 60
In this example, David is using
A. emotional forecasting.
B. problem-focused coping.
C. emotion-focused coping.
D. problem forecasting.

Question 61
Dane doesn’t follow football. He recently heard that the Essendon Football club lost 3 games in a row. According to the Lazarus and Folkman Transactional model of stress and coping, Dane is likely to appraise this situation as
A. threat.
B. harm/loss.
C. challenge.
D. neutral.

Question 62
Jasmine has recently been diagnosed with post-traumatic stress disorder. Jennifer has been diagnosed with dementia. Which of the following is true?
A. Jasmine has a disorder whereas Jennifer has a disease.
B. Jasmine has a disease whereas Jennifer has a disorder.
C. Both Jasmine and Jennifer have a disease.
D. Both Jasmine and Jennifer have a disorder.

Question 63
Stephanie is classified as having a mental disorder based on the dimensional approach to classification. The dimensional approach
A. is a “Yes” or “No” approach whereby a person either has the condition or they do not.
B. takes into consideration the severity of the disorder.
C. reduces the chances of a person being “labelled” as having a disorder.
D. is correctly described in options B and C, however option A is incorrect.
**Question 64**
The DSM-5 was released in 2013 and identifies approximately ______________ mental health conditions.

A. 257  
B. 365  
C. 410  
D. 301

**Question 65**
Since being diagnosed with Schizophrenia, Sonia has found that people treat her differently. She has been unable to get a full time job, many of her friends no longer want to associate with her and she has noticed that people are quick to disassociate themselves from her when they hear of her condition. Treating a person differently as a result of their condition is referred to as

A. schema.  
B. stigma.  
C. labelling.  
D. prejudice.

End of Section A
VCE Psychology 2015 Year 12 Trial Exam Units 3/4

SECTION B - Short Answer Questions

Question 1 (4 marks)
With the use of an example for each, explain the difference between controlled and automatic processes. Include in your answer, the level of attention that is required.

Question 2 (2 marks)
Many methods can be used to determine whether a person is experiencing an altered state of consciousness. The Galvanic Skin Response is one such measurement. What does the galvanic skin response measure? In your answer provide one reason as to why it may not be an accurate measure of an altered state of consciousness.

Question 3 (5 marks)
Monica is connected to an EEG and is experiencing NREM sleep. The EEG shows brainwave patterns that are not seen in any other stage of NREM sleep.

a. What does an EEG measure?
b. Name these unique brainwaves and provide a description of each.  

______________________________________________
______________________________________________
______________________________________________
______________________________________________

2 marks

c. List and describe two reasons why Monica is considered to be experiencing an altered state of consciousness while asleep.  

______________________________________________
______________________________________________
______________________________________________
______________________________________________

2 marks

Question 4 (5 marks)
a. Claudia has sustained damage to Broca’s area. Clearly state the lobe and hemisphere where Broca’s area is located.  

______________________________________________

1 mark

b. Explain the location of Broca’s area in relation to the primary motor cortex.  

______________________________________________

______________________________________________

______________________________________________

______________________________________________

2 marks

c. As a result of the damage, describe two ways that Claudia’s speech will be affected.  

______________________________________________

______________________________________________

______________________________________________

______________________________________________

2 marks
Question 5 (3 marks)
Bronte has had her corpus callosum severed. To determine how this has affected Bronte’s ability to cope with everyday life, a researcher has asked Bronte to complete a series of tests. In one of the tests, Bronte is asked to stare at a dot located in the middle of a screen. A picture of a cupcake is flashed on to the left side of the dot. Describe two ways Bronte can identify that she has seen a cupcake. In your answer, clearly explain why these two methods must be used.

__________________________________________________
__________________________________________________
__________________________________________________
__________________________________________________
__________________________________________________

3 marks

Question 6 (3 marks)
With reference to the Atkinson and Shiffrin Multi-Store Model of memory, why is it important for a student to pay attention while their teacher is explaining an important concept?

__________________________________________________
__________________________________________________
__________________________________________________
__________________________________________________
__________________________________________________

3 marks

Question 7 (7 marks)
Sam was riding his bike home from school when he fell and hit his head on the pavement. Unfortunately, Sam was not wearing a helmet at the time and sustained serious brain damage. As a result of the accident, Sam has suffered from anterograde amnesia.

a. What specific part of the brain has Sam most likely damaged? In which lobe is this brain structure located?

__________________________________________________
__________________________________________________

2 marks

b. How will having anterograde amnesia affect Sam’s everyday life?

__________________________________________________

1 mark
c. Luckily for Sam, his anterograde amnesia is only temporary. However, he is never able to remember the incident or the minutes leading up to the bike accident. Name and describe the theory which explains Sam’s inability to remember the incident.  

Question 8 (2 marks)  
Henry decides to remember his psychology course semantically, while Julian prefers to learn the course phonemically. Henry achieves a far greater result on his end of year psychology exam compared with Julian. Explain with reference to Craik and Lockhart’s Levels of Processing theory why Henry performed better than Julian.  

Question 9 (3 marks)  
Lema would like to use the semantic network theory to demonstrate the relationship between each nervous system. Explain how she can do this with reference to each of the three components of the semantic network theory.
Question 10 (3 marks)
Tiarna is asked to remember a mobile phone number. Unfortunately for Tiarna, she does not have a pen to write down the number and therefore must commit it to memory. To improve her chances of remembering the number, Tiarna decides to use chunking:

a. What is chunking? 1 mark
   ______________________________________________
   ______________________________________________

b. Why will chunking assist Tiarna in remembering the mobile phone number? 2 marks
   ______________________________________________
   ______________________________________________
   ______________________________________________
   ______________________________________________

Question 11 (2 marks)
Differentiate between a reflex action and a fixed action pattern: 2 marks
   ______________________________________________
   ______________________________________________
   ______________________________________________
   ______________________________________________
   ______________________________________________

Question 12 (1 mark)
When learning takes place, synaptogenesis can occur. What is synaptogenesis? 1 mark
   ______________________________________________
   ______________________________________________

Question 13 (3 marks)
There are five stages of developmental plasticity. Name and describe the first three stages: 3 marks
   ______________________________________________
   ______________________________________________
   ______________________________________________
   ______________________________________________
   ______________________________________________
   ______________________________________________
Question 14 (3 marks)
Explain with the use of classical conditioning terms, how aversion therapy can be used to overcome a person’s nail biting habit.

________________________________________________________________________________________________________________________________________________________

Question 15 (4 marks)
Katrina would like to use operant conditioning to teach her dog how to “shake hands”. Initially, Katrina uses continuous reinforcement. Once her dog has learnt how to shake, she uses a variable ratio schedule of reinforcement.

a. Explain what is meant by a continuous schedule of reinforcement and why Katrina would initially use this.

________________________________________________________________________________________________________________________________________________________

b. Explain what is meant by a variable ratio schedule of reinforcement and why Katrina would use this once learning has occurred.

________________________________________________________________________________________________________________________________________________________

Question 16 (4 marks)
Samantha has been in a car accident and her car is unable to be fixed. According to Lazarus and Folkman’s transactional model of stress and coping, name and explain two different primary appraisals that Samantha may make.

________________________________________________________________________________________________________________________________________________________

________________________________________________________________________________________________________________________________________________________

________________________________________________________________________________________________________________________________________________________

________________________________________________________________________________________________________________________________________________________
Question 17 (2 marks)
Explain how the Biopsychosocial Model is a holistic approach to mental and physical health. 

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

Question 18 (2 marks)
Describe two strengths of using the categorical approach to classify mental disorders.

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

Question 19 (2 marks)
Explain how social factors can both exacerbate and alleviate the stress response.

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

End of Section B
VCE Psychology 2015 Year 12 Trial Exam Units 3/4

SECTION C – Extended Response Question

Mr Jackson would like to investigate whether students are more likely to remember information if it is presented visually or orally. To test his theory, Mr Jackson gains permission from Newcomb Secondary College to use their Year Twelve students as subjects. He places the names of all 200 Year Twelve students into a hat and randomly selects 100 students as his sample. The sample consists of 50 boys and 50 girls. All subjects are under 18 years of age. Mr Jackson provides the students with consent forms which are then signed and returned before the commencement of the investigation. The sample is further divided into Group 1 and Group 2 (each consisting of 25 boys and 25 girls).

Group 1 is required to learn a list of 50 words that are presented visually on a screen. Group 2 is required to learn a list of 50 words that are read aloud by Mr Jackson. At the conclusion of the investigation, the students from both groups are asked to write down as many words as they can remember.

The results are as follows:

<table>
<thead>
<tr>
<th></th>
<th>Mean number of words recalled (out of 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>27</td>
</tr>
<tr>
<td>Group 2</td>
<td>14</td>
</tr>
</tbody>
</table>

Mr Jackson set the p value at 0.05. The p value was calculated at p=0.04.

**Question 1 (2 marks)**
State two pieces of information that Mr Jackson would be required to include on the consent form.

**Question 2 (2 marks)**
Outline the withdrawal rights that the participants are entitled to both during and after the study.

**Question 3 (1 mark)**
Are the results statistically significant?
Extended Response:
You are required to write a psychological report based on the research conducted by Mr Jackson. Your report must include the following information:
– A research hypothesis.
– Identification of Independent and Dependent Variables.
– An explanation of how Mr Jackson could adhere to the ethical principles of voluntary participation and confidentiality.
– Discussion regarding the research design Mr Jackson used and how the use of a different design would have improved the investigation.
– A conclusion and possible generalisation.

10 marks
End of Section C

End of Trial Exam
Suggested Answers

VCE Psychology 2015 Year 12 Trial Exam Units 3/4

SECTION A - Multiple Choice Answers


SECTION B - Short Answer (Answers)

Question 1
Controlled processes are tasks that are difficult to perform and require a high level of concentration. These tasks require selective attention (1 mark). An example of a controlled process is learning to drive a car (1 mark).
Automatic processes are often simple tasks that can be performed at the same time as other tasks. Automatic processes can be performed with divided attention (1 mark). An example of an automatic process is washing the dishes and listening to music at the same time (1 mark).

Question 2
Students can state either of the following for 1 mark.
The Galvanic skin response measures the electrical conductivity of the skin’s surface.
or
The Galvanic Skin Response measures the resistance of the skin’s surface to an electrical current.

The GSR is not always an accurate measurement that a person is experiencing an altered state of consciousness. People may perspire for a variety of reasons, for example room temperature, physical exercise and anxiety. These are not examples of an ASC (1 mark)

Total marks = 2 marks
Question 3
a. An EEG detects, amplifies and records electrical activity of the brain in the form of brainwaves (1 mark).
b. Sleep spindles – A brief burst of high frequency, low amplitude brainwaves (1 mark). K complex – A single burst of high amplitude, low frequency brainwave (1 mark).
c. Students can choose any of the following reasons. Students are awarded one mark for each reason provided an appropriate explanation is given (2 marks).
   - Distorted perception of time.
   - Less content limitations.
   - Lower levels of awareness.
   - Reduction in ability to perform controlled and automatic processes.
   - Perceptual and cognitive distortions.
   - More or less emotional awareness.
   - Less self-control.

Question 4
a. Frontal lobe, Left Hemisphere (1 mark).
b. Broca’s area is located near the primary motor cortex, specifically near the region of the primary motor cortex responsible for the movement of the mouth, lips and tongue (1 mark). Broca’s area is responsible for the production of articulate speech and therefore requires the movement of these body parts, hence its close proximity to the primary motor cortex (1 mark).
c. Claudia will have difficulty with the production of articulate speech (1 mark). Claudia will have difficulty analysing the grammatical structure of a sentence (1 mark).

Question 5
As Bronte is a split brain patient she is unable to verbally state that she has seen a cupcake. This is due to the severing of the corpus callosum which prevents information in the right hemisphere being transferred to the left hemisphere where the speech centres are located (1 mark). Bronte can either draw a picture of the cupcake with her left hand (1 mark) or point to a cupcake with her left hand (1 mark). Please note, students should identify the hand that Bronte must use in order to achieve full marks.

Question 6
The Atkinson and Shiffrin Multi-Store Model of memory states that all incoming sensory information is first registered in sensory memory (1 mark). If a person pays attention to this sensory information then it is transferred to short-term memory and finally on to long-term memory if further encoding and rehearsal has taken place (1 mark). Therefore, if a student does not pay attention while a teacher is explaining an important concept, the information cannot be transferred to short-term memory and is therefore lost forever (1 mark).
Question 7
a. Sam has most likely damaged his hippocampus (1 mark) which is located in the medial temporal lobe (1 mark).

b. As a result of anterograde amnesia, Sam will be unable to form new memories since the bike accident occurred (1 mark).

c. Consolidation theory (1 mark). According to the consolidation theory, three conditions must be present for a memory to form. These conditions include - a physical change must occur in the brain, no disruption and approximately 30 minutes must pass. As Sam experienced disruption while the memory was forming, consolidation was unable to take place (3 marks).

Question 8
According to Craik and Lockhart, the deeper the processing of information, the greater the chance of it being retrieved. As Henry used semantic encoding, he learnt the psychology course by relating meaning to the psychological concepts. This is a deep level of processing (1 mark). Julian, on the other hand, learnt the psychology course by remembering concepts by how they sound. This is a shallower level of encoding and therefore the information was not as easily retrieved (1 mark).

Question 9
In creating the semantic network, Lema would need to include the following:
Nodes – These are the named units of information. For example, each nervous system (peripheral, somatic, autonomic etc.) (1 mark).

Links – The lines showing the relationship between the nodes. For example, the lines connecting the peripheral nervous system to the somatic and autonomic nervous systems would be the “links” (1 mark).

Hierarchical Structure - Several nodes on a lower level (somatic and autonomic) form one node on a higher level (peripheral). (1 mark).

Question 10
a. Chunking is the grouping together of smaller items to create a larger unit or “chunk”. (1 mark).

b. The capacity of short term memory is 7±2 (or 5-9) bits of information. A mobile phone number has 10 items of information which is greater than the capacity of short term memory (1 mark). By chunking the mobile phone number, Tiarna will create only 3 units of information to be remembered and therefore within the capacity of short term memory (1 mark).
Question 11
A reflex action is an automatic, involuntary and simple response that does not require prior experience. An example would be blinking when a puff of air is blown in the eyes (1 mark). A fixed action pattern is a complex behaviour that is inherited by every member of a species and is exhibited when the species is appropriately stimulated by environmental stimuli. For example, a spider spinning a web (1 mark).

Question 12
Synaptogenesis is the process of moulding or forming new synapses (1 mark).

Question 13
Please note, to receive the full mark for each stage, students must correctly state the name of the stage and provide an explanation.

Proliferation – This is the process whereby the unborn baby’s cells divide and multiply (1 mark).

Migration – Newly formed neurons move towards their destined location (1 mark).

Circuit formation – The axons of new neurons grow towards target cells and form synapses (1 mark).

Question 14
Initially, biting your nails is a neutral stimulus which provokes no response (1 mark). When paired with a bitter tasting substance (unconditioned stimulus) that is applied to the nails, the person has a terrible taste in their mouth (unconditioned response) (1 mark). After a number of pairings of the nail biting and the bitter tasting substance, the nail biting becomes the conditioned stimulus causing the conditioned response of a terrible taste in the mouth. As a result, the person ceases biting their fingernails (1 mark).

Question 15
a. Continuous reinforcement is when the individual (in this case the dog) is reinforced for every correct response. In other words, the dog would receive praise/dog treat every time it shook hands (1 mark). Katrina would initially use continuous reinforcement during the acquisition phase as behaviours are learnt more quickly using this type of reinforcement (1 mark).

b. In a variable ratio schedule of reinforcement, reinforcement occurs on the basis of a set average number of correct responses but the reinforcement is not regular in its occurrence (1 mark). Katrina would use this schedule of reinforcement as it has high resistance to extinction and produces a high and steady rate of responses (1 mark).
Question 16
Threat/Harm/Loss (1 mark) – Samantha may assess the situation that some type of damage has been done or that future damage may occur as a result of the accident. She may not know how she will cope without her car (1 mark).
Challenge (1 mark) – Samantha may welcome the challenge of no longer having this car because she can now buy a new car, or she may like the idea of catching public transport to work (1 mark).

Question 17
The Biopsychosocial Model is a holistic approach as it takes into consideration three different areas relating to a person’s mental and physical health. These areas include: biological, psychological and social factors (1 mark). These three areas are considered in both the assessment and treatment of mental and physical disorders (1 mark).

Question 18
Any two of the following for one mark each (maximum 2 marks).
The categorical approach uses manuals such as the ICD-10 and the DSM-5, which provide a common language for therapists, researchers, social agencies and health workers. Therapists will treat patients similarly once classified as having a mental disorder if that mental disorder has been diagnosed by means of the categorical approach. A major strength of this approach is that it allows for consistent diagnoses and treatments from hospital to hospital and from clinic to clinic. This has not always been the case.

Question 19
Social factors can exacerbate the stress response as some people may be isolated from friendship groups or even bullied by people who they once considered to be their friends (1 mark for a similar explanation). Social factors can alleviate the stress response because other people such as family and friends can provide support during times of stress which will alleviate the stress response (1 mark for a similar explanation).
SECTION C – Extended Response Answers

Question 1
Any two of the following for a maximum of (2 marks).
- The nature of the investigation
- The rights of the participants
- Any risks involved

Question 2
During the investigation, students are allowed to leave at any time (1 mark).
Following the completion of the study, students have the right to withdraw their results (1 mark).

Question 3
The results are statistically significant as the p value is less than 0.05 (1 mark).

Extended Response: Total = 10 marks
Please note, students may write a slight variation to the following responses and still be awarded full marks:

Research Hypothesis:
Year 12 students at Newcomb Secondary College who learn information visually will recall more information compared to those students who learn the information orally (2 marks for a similar hypothesis).

Independent Variable:
How the information is presented (operationally defined as whether information was presented visually or orally) (1 mark).

Dependent Variable:
Recall (operationally defined as number of words recalled from 50 word list) (1 mark)

Ethical Principles

Voluntary participation: Mr Jackson must ensure that participants have the right to refuse to take part in the study. He cannot pressure students, nor should they be tricked into participation (1 mark).

Confidentiality:
Mr Jackson must ensure that participants must not be identified in any way. All data must be kept private and student names cannot be associated with the data (1 mark).
Research Design:
Mr Jackson used an Independent Groups design. In this design, participants are allocated to one of two groups (usually a control and an experimental group) (1 mark). To improve this investigation, he could have used either a repeated measures design or a matched participants design. Students to explain either of the following for a maximum of (1 mark).
- Repeated measures design – Mr Jackson would have allowed the entire sample (all 100 students) to experience both conditions. Therefore, all students would be presented with the words visually and then orally, therefore reducing the number of participant related variables (1 mark).
- Matched participants design – Students would be pre-tested on characteristics relevant to the study (e.g. intelligence, memory ability, listening ability etc.). Students would then be matched in pairs depending on these characteristics. One member would be allocated to Group 1, while the other member would be allocated to Group 2, therefore reducing the number of participant related variables (1 mark).

Conclusion:
The hypothesis "Year 12 students at Newcomb Secondary College who learn information visually will recall more information compared to those students who learn the information orally" is supported (1 mark).

Generalisation:
The results of this investigation can be generalised to the population as each member of the population had an equal chance of being chosen for the investigation (1 mark).

End of Suggested Answers