



VCE PSYCHOLOGY 2013

YEAR 12 PRACTICE EXAM UNIT 3

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Time allowed: 150 minutes

Total marks: 125

Section A – Multiple Choice Questions 65 marks

Section B – Short Answer Questions 50 marks

Section C – Extended Response Question 10 marks

An Answer Sheet is provided for Section A.

Answer all questions in Section B & C in the space provided.

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Student Name.....

VCE Psychology 2013 Year 12 Practice Exam

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 and enter the correct answer. Marks will not be deducted for incorrect answers.

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

Question 39 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 40 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

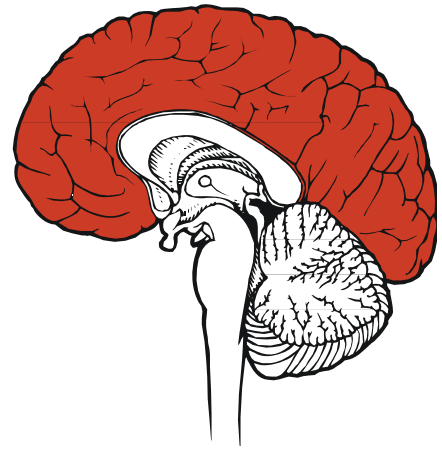
VCE Psychology 2013 Year 12 Practice Exam Unit 3

SECTION A – Multiple Choice Questions

Question 1

Ali has recently been involved in a car accident and is suffering from spatial neglect. Which part of Ali's brain is most likely to be damaged?

- A. Broca's area.
- B. The left hemisphere.
- C. The right parietal lobe.
- D. Wernicke's area.



Question 2

In essence, how would spatial neglect affect Ali's daily routines?

- A. Ali would pay no attention to the left side of her visual space.
- B. Ali would pay no attention to the right side of her visual space.
- C. Ali would speak in "broken", non-fluent language.
- D. It would have no effect on her daily routines.

Question 3

Adam feels a mosquito bite his right leg. The part of his brain enabling Adam to feel this sensation is the

- A. left parietal lobe.
- B. right parietal lobe.
- C. left temporal lobe.
- D. right temporal lobe.

Question 4

The frontal lobes are associated with higher mental abilities. Two major areas that are held within the frontal lobe are _____ and _____.

- A. motor cortex, Wernicke's area
- B. somatosensory cortex, Broca's area
- C. somatosensory cortex, Wernicke's area
- D. motor cortex, Broca's area

Question 5

Darshini is making a cup of hot chocolate. The division of the nervous system enabling Darshini to perform the voluntary actions required to make the cup of hot chocolate is the

- A. Somatic Nervous system.
- B. Central Nervous system.
- C. Sympathetic Nervous system.
- D. Parasympathetic Nervous system.

Question 6

The Year 12 Psychology class at Cerebrum Secondary College has been instructed that they all must participate in research looking at the relationship between stress and eating chocolate. All students/parents have been informed about the study and have been told they may withdraw at any time they wish and that their personal details will not be published. The ethical consideration that has not been met for this research is

- A. beneficence.
- B. informed consent.
- C. withdrawal rights.
- D. voluntary participation.

Question 7

The experience of sensation and perception in an ASC is often very different from that in NWC. An example of an ASC would be

- A. taking pain medication.
- B. watching an interesting show on TV.
- C. doing an exam.
- D. explaining the rules of baseball.

Question 8

Justin is finishing off some homework for his Literature SAC while listening to the “Foxboro Hot Tubs”. His ability to complete his SAC while listening to the music at the same time is possible for Justin because to him, both these actions are considered to be

- A. automatic processes.
- B. controlled processes.
- C. autonomic processes.
- D. an ASC.

Question 9

The frequency of brain activity refers to the number of brain waves per second. A pattern of _____ frequency refers to greater brain activity.

- A. low
- B. strong
- C. high
- D. weak

Question 10

If the reading on the Galvanic Skin Response (GSR) is showing high levels of activity, it can be said that there is

- A. high electrical resistance.
- B. low electrical resistance.
- C. no electrical resistance.
- D. very little sweat.

Question 11

One of the main limitations of using a thermometer as a method of measuring consciousness is that

- A. they can be inaccurate.
- B. it is unethical to measure a person's body temperature while they are in an altered state of consciousness.
- C. body temperature is less variable.
- D. changes in body temperature are too great.

Question 12

Although the brain waves of REM sleep are similar to those emitted by someone who is awake, the person in REM sleep is sound asleep. This is why REM sleep is often referred to as

- A. rebound sleep.
- B. deep sleep.
- C. paradoxical sleep.
- D. paradigm sleep.

Question 13

Nathan and his friends are celebrating "Schoolies" down at Philip Island. For four days he and his mates are up at 9:00am and don't get to bed until 4:00am. They are all suffering from mild sleep deprivation. Which of the following physical effects would be an indication of their sleep deprivation?

- A. Increased pain sensitivity.
- B. Hallucinations.
- C. Personality change.
- D. Inability to complete simple tasks.

Question 14

Consciousness can be described as

- A. the awareness of objects and events in the external world and of our own existence and mental experiences at any given moment.
- B. our mental experiences and internal thoughts at any given moment.
- C. shifting our awareness from our external surroundings to our internal thoughts and feelings.
- D. the awareness that our mind and body are two different things.

Question 15

According to the "consciousness continuum", which of the following is correct?

- A. A person who is daydreaming is more aware of their surroundings than a person who is in a meditative state.
- B. A person who is hypnotised is more aware of their surroundings than a person who is in a meditative state.
- C. A person who is daydreaming is more aware of their surroundings than a person who is demonstrating focussed attention.
- D. A person who is asleep is more aware of their surroundings than a person who is hypnotised.

Question 16

Daydreaming is considered to be _____. Daydreams are more likely to be experienced when a person is _____ or _____.

- A. Normal waking consciousness, stationary, bored
- B. Normal waking consciousness, active, bored
- C. an Altered state of consciousness, stationary, bored
- D. an Altered state of consciousness, active, lonely

Question 17

A person's consciousness can be measured, using a number of devices. One of these devices is the galvanic skin response. This device measures consciousness by

- A. measuring the amount of sweat that is produced by the sweat glands on the palm of the hand.
- B. detecting, amplifying and recording the electrical activity of the skin.
- C. measuring the electrical conductivity of the skin's surface.
- D. placing electrodes on the surface of the skin.

Questions 18-21 refer to the following information.

James is having difficulty sleeping. On his doctor's advice, James visits a sleep clinic in which he is attached to a number of recording devices. The devices record information regarding James' sleep patterns from the time he goes to sleep at 11:00 p.m. until the time he wakes at 7:00 p.m.

Question 18

Assuming that James remains asleep for the duration of the night, what is expected to happen to his REM stages as the night progresses?

- A. They will occur less often.
- B. They will occur more often, however will be shorter in length.
- C. They will occur more often and will be longer in length.
- D. They will become "shallower" as the night progresses.

Question 19

Which of the following devices would be the least accurate in determining whether or not James was experiencing REM sleep?

- A. Core body temperature.
- B. Electromyograph.
- C. Electrooculargraph.
- D. Electroencephalograph.

Question 20

Whilst James is asleep, the electroencephalograph detects sleep spindles and K complexes. At this point in time, James would be experiencing the following sleep stage:

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

Question 21

Sleep spindles are characterised by _____, while K complexes show _____.

- A. brief bursts of lower frequency brain wave activity; high frequency and slightly higher amplitude waves
- B. brief bursts of higher frequency brain wave activity; low frequency and slightly higher amplitude waves
- C. low frequency and slightly higher amplitude waves; brief bursts of higher frequency brain wave activity
- D. high frequency and slightly higher amplitude waves; brief bursts of lower frequency brain wave activity

Question 22

The main function of the corpus callosum is to

- A. connect the two halves of the brain.
- B. form a protective layer that surrounds the brain.
- C. enable the transfer of information between the two hemispheres.
- D. form a "bridge" between the two hemispheres to enable the left hand side of the brain to know what the right hand side of the brain is doing and vice versa.

Question 23

Which of the following is **not** true regarding the organisation of the primary motor cortex?

- A. Body parts that are more dextrous have a greater representation on the primary motor cortex.
- B. Body parts that are located lower on the body are located higher on the primary motor cortex.
- C. Larger body parts have a greater representation on the primary motor cortex than smaller body parts.
- D. The left primary motor cortex controls voluntary movement on the right side of the body.

Question 24

Which of the following is **not** true regarding short term memory?

- A. Short Term Memory is often referred to as "working memory".
- B. Short Term Memory has a capacity of 7 ± 2 bits of information.
- C. Elaborative rehearsal maintains information in Short Term Memory for an unlimited period of time.
- D. Chunking increases the capacity, but not the duration of Short Term Memory.

Question 25

Samantha and Mary are both teachers at a new school. Samantha has decided to use maintenance rehearsal to learn the names of the students in her class, while Mary has decided to use elaborative rehearsal. Which of the following is likely to be true?

- A. Samantha will associate each student's name with a geographical location in the classroom.
- B. Mary will repeat her students names over and over until they finally "sink in".
- C. Mary will be more likely to remember the students in her class as the names of the students are more likely to be linked to information already stored in her Long Term Memory.
- D. Samantha and Mary are both likely to remember their students names for only a short period of time as the names of the students will be lost from Sensory Memory.

Question 26

Krystal is a brilliant pianist. She has been playing the piano since the age of three and now at the age of 16 has the ability to play in front of large audiences. Krystal knows that a piano has 88 keys, she can remember the first time she bought a piano and she knows how to play a piece called "A Handful of Keys". Which of the following is true regarding Krystal's memory regarding the piano?

- A. Krystal knowing that the piano has 88 keys is an example of procedural memory.
- B. Krystal knowing how to play "A Handful of Keys" is an example of declarative memory.
- C. Krystal remembering the first time she bought a piano is an example of episodic memory.
- D. None of the above.

Questions 27-29 refer to the following information.

Sarah has been asked by her mother to buy a number of items from the shop. Unfortunately Sarah does not have a pen to write down the items and therefore attempts to remember them. Her mother tells Sarah the items, but Sarah only appears to remember the names of the items at the beginning and at the end of the list.

Question 27

Sarah's ability to remember the items at the beginning and end of the list is due to

- A. items in the middle of the list having been forgotten as they are only stored in sensory memory.
- B. items at the end of the list being stored in long term memory, while items at the beginning of the list are stored in short term memory.
- C. items in the middle of the list not being stored in either short term memory or long term memory and are therefore forgotten.
- D. items at the end of the list being stored in sensory memory, while items at the beginning of the list are stored in short term memory.

Question 28

Sarah's ability to remember items at the end of the list is referred to as the

- A. Serial Position Effect.
- B. Primacy Effect.
- C. Recency Effect.
- D. Order Effect.

Question 29

If Sarah was to wait 45 seconds at the conclusion of her mother calling out the list before attempting to commit the shopping items to memory, what would be the likely effect?

- A. Recall will be superior for words at the beginning of the list.
- B. Recall will be superior for words at the end of the list.
- C. Recall will be superior for words in the middle of the list.
- D. There will be no difference in the recall of words.

Question 30

Jamie has been summoned for jury duty. He is listening to a case regarding a man who stole a lady's purse. The lawyer asks the following question "What colour balaclava was the man wearing when he stole the lady's purse?" This question assumes that the man was wearing a balaclava. This is an example of a(n) _____ question.

- A. misleading
- B. leading
- C. inappropriate
- D. manipulative

Question 31

Sharon has thoroughly enjoyed learning psychology. She has been happy in all classes this year and finds psychology to be her favourite subject. On the day of her psychology exam, Sharon spends the morning with friends who she knows will also make her happy. Sharon is attempting to use _____ cues.

- A. state dependent
- B. context dependent
- C. both State dependent and Context dependent
- D. recall

Question 32

Representing a stimulus according to its meaning is referred to as _____ encoding.

- A. acoustic
- B. visual
- C. semantic
- D. sensory

Question 33

If attended to, sensory memory holds information for only a few seconds or less. However, psychologists believe that the capacity of sensory memory is _____.

- A. unlimited
- B. limited
- C. ever-changing
- D. selective

Question 34

If unattended to, sensory information will be

- A. transferred to STM.
- B. lost forever.
- C. transferred to LTM.
- D. remembered for a short period of time.

Question 35

The best method used to hold information in STM for a greater amount of time is _____ rehearsal.

- A. elaborative
- B. automatic
- C. short term
- D. maintenance

Question 36

A major advantage of maintenance rehearsal is that

- A. maintenance rehearsal ensures that information is always transferred to LTM.
- B. maintenance rehearsal adds meaning to information entering short term memory.
- C. it is good for remembering meaningless information.
- D. it is an excellent form of deep processing.

Question 37

Chunking is more effective when

- A. information is deliberately arranged into chunks already similar to information stored in LTM.
- B. information does not go beyond seven plus or minus 2 pieces of information.
- C. the information being chunked is repeated time and time again.
- D. large pieces of information are broken down into smaller pieces.

Question 38

In a Psychology class, students were asked to memorise a list of 15 words that were read to them at 1 second intervals. At the conclusion of the list being read, the students were required to wait 40 seconds prior to writing down the list of words remembered. The sequence that best typifies this experiment is

- A. recency effect, primacy effect, middle.
- B. primacy effect, middle, recency effect.
- C. primacy effect, recency effect, middle.
- D. middle, primacy effect, recency effect.

Question 39

The effect of proactive interference is lessened when

- A. new information is similar to the old information.
- B. new information is as meaningful as the old information.
- C. new information is rehearsed in a similar fashion to old information.
- D. new information is substantially different from old information.

Question 40

Daydreaming is considered to be an ASC and is where attention is shifted away from external stimuli to an inner private reality. Daydreams are

- A. associated with many eye movements and low levels of alpha brain waves.
- B. associated with few eye movements and high levels of alpha brain waves.
- C. associated with many eye movements and high levels of beta brain waves.
- D. associated with few eye movements and high levels of beta brain waves.

Question 41

Which of the following is **not** thought to be a benefit of daydreaming? It

- A. blocks out information you consider to be irrelevant.
- B. reduces tension of unfulfilled wishes and needs.
- C. facilitates problem solving.
- D. enables an individual to stay mentally alert in a boring situation.

Question 42

Sally has just gained her license and is concentrating on monitoring the road, steering the car, looking at road signs and the like. At this stage, she won't have the radio on or hold a conversation with others in the car. For Sally, driving can be considered

- A. an automatic process as it involves higher levels of awareness and focused attention.
- B. an automatic process as it does not interfere with other tasks and is performed with little conscious effort and minimal attention.
- C. a controlled process, as it involves higher levels of awareness and focused attention.
- D. a controlled process, as it does not interfere with other tasks and is performed with little conscious effort and minimal attention.

Question 43

Which of the following is **not** true regarding the primary somatosensory cortex?

- A. The right somatosensory cortex receives information regarding temperature from the right side of the body.
- B. The somatosensory cortex enables you to feel a burn from steam on your arm.
- C. The somatosensory cortex indicates the position of your hands when you are about to catch a ball.
- D. The somatosensory cortex would register information letting you know whether your shoes had been tied too tightly.

Question 44

Jimmy is in hospital being tested for a particular brain disorder. In one test they ask Jimmy to read the words football and clockwise. Jimmy responds by saying "ball" and "wise". In test two, he is asked to draw a clock, and although Jimmy draws the circle correctly, he puts all the numbers onto the right hand side of the clock only. The doctor's believe that Jimmy is suffering from _____, which is caused by damage to the _____.

- A. Wernicke's Aphasia, left temporal lobe
- B. Broca's Aphasia, left frontal lobe
- C. spatial neglect, right parietal lobe
- D. amnesia, thalamus

Question 45

Dylan is an electrician and is working in the attic of a client's house installing some down lights. Whilst concentrating on his work, Dylan feels something crawling on his leg. He immediately moves his hand in an attempt to brush off the offending bug. The nervous system that enabled Dylan to sense and respond to the bug is referred to as the

- A. Central Nervous System.
- B. Parasympathetic Nervous System.
- C. Autonomic Nervous System.
- D. Somatic Nervous System.

Question 46

According to Baddeley and Hitch's model of working memory, which of the following is *not* true regarding the function of the episodic buffer?

- A. It is a subsystem of working memory that enables the different components of working memory to interact with long term memory.
- B. It is assumed to be a limited capacity temporary storage system that holds about four chunks of information.
- C. It is under the control of the central executive.
- D. It is capable of only holding information from the visuo-spatial sketchpad.

Question 47

Dementia is said to be a neurodegenerative disease. Which of the following is *not* true regarding dementia?

- A. A person with dementia often experiences memory loss.
- B. A decline in intellectual ability is a common symptom seen in dementia sufferers.
- C. Dementia is considered to be a normal part of the aging process as it affects many Australians.
- D. People with dementia often suffer from poor social skills and abnormal emotional reactions.

Question 48

Research into the effects of aging on short term and long term memory has revealed that

- A. STM is affected by age if the task is considered difficult.
- B. STM is affected by age if the task is considered easy.
- C. procedural memories stored in long term memory are forgotten before episodic memories.
- D. procedural memories stored in STM are forgotten at the same rate as episodic memories that are stored in STM.

Question 49

In using nonsense syllables to test forgetting, Ebbinghaus was able to

- A. establish a cause-effect relationship in regards to the forgetting curve.
- B. avoid the potential influence of past experience on the information being learned.
- C. test possible new words to be incorporated into the English language.
- D. show the potential influence of past experience on the information being learned.

Question 50

Why is relearning also called the "method of savings"?

- A. Because as you relearn you establish more meaningful links with similar concepts.
- B. Because as you have already learnt material in the past, you don't need to revise it at a later date.
- C. Because retrieval is faster within relearning.
- D. Because it can be used to measure the amount of information "saved" from previous learning.

Question 51

Tip of the Tongue (TOT) occurs when you are aware of knowing something, and confident that you will eventually remember it, but you are not able to retrieve it from memory at that point in time. Research into TOT is important as it has illustrated several aspects of the retrieval process. Which of the following is *not* supported by this research?

- A. It seems that retrieving information is not an all-or-nothing process.
- B. In many instances information is stored in long term memory but is not accessible without the right retrieval cue.
- C. Retrieval of information from LTM must be in concepts according to meaning.
- D. Information stored in long term memory is organized and connected in relatively logical ways.

Question 52

Little Farrar is only 5 years old. Her father is trying to teach her the directions on a compass. He explains to her that an easy way to remember them is by taking the first letter of each direction (North, East, West and South) and forming a new word (news). In this case the word "news" is considered to be an

- A. acronym.
- B. acrostic.
- C. acoustic.
- D. anagram.

Question 53

Mick Jagger is going to music classes. In his first lesson he is told the phrase "every good boy deserves fruit". The first letters of each of these words form the names of the musical notes on the lines of a staff (EGBDF). In this case, the phrase is considered to be an

- A. acronym.
- B. acrostic.
- C. acoustic.
- D. anagram.

Question 54

The cerebral cortex in the human brain is highly convoluted, and serves the purpose of increasing the cerebrum's surface area. This is important as it

- A. connects the two hemispheres of the brain.
- B. increases the number of neurons and therefore more neural connections are possible.
- C. gives us more grey matter.
- D. allows us to transduce visual information.

Question 55

Rebecca is shown a picture of a girl going to the beach. Asked to describe it she says "Where the day over there in sea, and looks for her go". Rebecca is most likely suffering from

- A. Wernicke's aphasia.
- B. Broca's aphasia.
- C. Somatosensory aphasia.
- D. a tumor.

Question 56

Which of the following would **not** be considered a specialized function of the right hemisphere?

- A. Receipt of sensations from the left side of the body.
- B. Recognition of faces.
- C. Comprehension of language.
- D. Emotional expression.

Question 57

Kyan is in Year Twelve and has only slept 10 hours over the past two days. He is asked to do the following activities

- A – Colour in a picture of a rabbit without going outside the lines
- B – Complete a grade 6 mathematics test consisting of 20 questions
- C – Cook a cheesecake for the first time using a recipe he has never seen

In terms of Kyan's ability to perform these tasks, he would find _____ and _____ quite challenging, while _____ would be completed rather well.

- A. A, B; C
- B. A, C; B
- C. B, C; A
- D. All would be completed easily.

Question 58

Information passes into working memory from

- A. STM.
- B. sensory memory.
- C. LTM.
- D. both B and C.

Question 59

Which of the following is not considered a division of STM?

- A. The phonological loop.
- B. The central executive.
- C. Procedural memory.
- D. The visuospatial sketchpad.

Question 60

You have been introduced to a friend's cousin and you repeat that person's name over and over in your mind with no elaborative processing. This approach is most likely to serve as

- A. encoding rehearsal.
- B. chunking.
- C. maintenance rehearsal.
- D. echoic memory.

Question 61

When forgetting occurs because other memories get in the way of our ability to remember a given memory, this is referred to as

- A. implicit-memory theory.
- B. dual-coding theory.
- C. interference theory.
- D. decay theory.

Question 62

What kind of information in your memory allows you to be a skillful dancer?

- A. Procedural.
- B. Declarative.
- C. Semantic.
- D. Episodic.

Question 63

Which of the following best describes the forgetting curve?

- A. Around a quarter of the memory loss occurs within the first hour after learning. This rapid loss is then followed by a slow decline over time.
- B. Around half of the memory loss occurs within the first hour after learning. This rapid loss is then followed by a slow decline over time.
- C. Around half of the memory loss occurs within the first day after learning. This rapid loss is then followed by a slow decline over time.
- D. Around half of the memory loss occurs within the first hour after learning. This rapid loss is then followed by a further rapid decline over time.

Question 64

Roger has seen his house burnt to the ground in the recent Victorian bushfires. As a result, he has suffered significant trauma. Much of his experience has been sent to his unconscious mind. This is referred to as

- A. suppression.
- B. retention.
- C. surrealism.
- D. repression.

Question 65

The best definition of a mnemonic device would be

- A. that there is a critical time period necessary for information to be set in memory.
- B. that information is mentally repeated without any reference to its meaning.
- C. that it is a technique or tool used deliberately to improve memory.
- D. that it is a method of using physiological cues to improve memory.

End of Section A

VCE Psychology 2013 Year 12 Practice Exam Unit 3

SECTION B – Short Answer Questions

Question 1

a. What is a repeated measures design?

_____ (1 mark)

b. What is an advantage of using a repeated measures design?

_____ (1 mark)

c. Explain what counterbalancing is and why it is required within a repeated measures design.

_____ (2 marks)

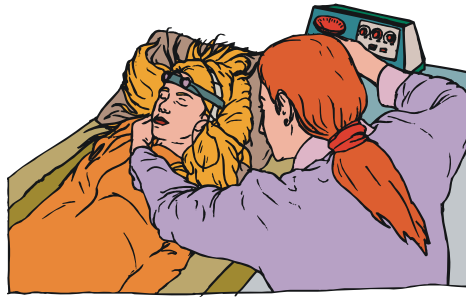
Question 2

Why is it illegal for a P-plate driver to use a mobile phone while driving?

_____ (2 marks)

Question 3

In terms of frequency and amplitude, explain how brain wave patterns would differ from a person in deep sleep compared to when they were in REM sleep.



(2 marks)

Question 4

Explain how an Electroencephalograph can be used to determine whether or not someone is asleep.

(3 marks)

Question 5

Professor Shrink wants to conduct an experiment to determine whether adequate sleep reduces irritability. He would like to eliminate as many participant related variables as possible.

a. Name the experimental design that Professor Shrink should use.

(1 mark)

b. What is the unwanted effect that could occur by using this experimental design?

(1 mark)

c. How could Professor Shrink eliminate the effect identified in (b)?

(2 marks)

Question 6

Chelsea is undertaking a six week computer course. At the end of the six weeks, Chelsea will be given an examination. Explain the terms encoding, storage and retrieval in relation to Chelsea learning the computer course and being examined at a later date.

(3 marks)

Question 7

Provide one reason as to why memory decline may occur in an elderly person who is healthy.

(1 mark)

Question 8

On the school holidays, Nathan travelled down to Philip Island to race the go-karts with some of his mates. Travelling at quite a speed only 10 minutes into the race, his car flipped over and Nathan hit his head on the side of the go-kart, resulting in him being unconscious for a few moments. Later, he could not remember where he had been or how his accident had happened. Use consolidation theory to explain Nathan's memory lapse regarding events since he hit his head.

(2 marks)

Question 9

Professor Morris is researching the effects of caffeine on sleep at Beamo Secondary College. The school has quite a diverse multicultural population, with varying numbers of students within each ethnic group.

- a. What sampling method would Professor Morris need to apply to his research in order to control the participant variable of student ethnicity?

_____ (1 mark)

- b. Briefly explain what Professor Morris would need to do.

_____ (2 marks)

Question 10

What is the role of the Central Nervous System?

_____ (2 marks)

Question 11

Alcohol is classified as a depressant, and its specific effects on consciousness can depend on many variables. Using psychological terminology, state two ways in which alcohol may affect consciousness.

_____ (2 marks)

Question 12

According to Craik and Lockhart's levels of processing framework, explain why elaborative rehearsal is more effective than maintenance rehearsal.

_____ (2 marks)

Question 13

Recall, recognition and relearning differ in their relative sensitivity as a measure of retention. Relearning is often described as the most sensitive measure of retention. What does this mean?

(2 marks)

Question 14

Samantha and Steven are travelling in a car together to their Year Twelve Formal. As they approach a green light, a car comes through the red light and smashes into their car. Both Samantha and Steven suffered brain damage. Samantha can understand the words of others, but her speech contains only short, basic sentences with many “joining” words left out. Steven speaks fluently, but his sentences do not make sense, and he finds it difficult to understand what others are saying to him.

Name the area of the brain most likely damaged and explain why this damage would result in each person’s particular symptoms.

Samantha:

Area of brain damaged: _____

Explanation:

Steven:

Area of brain damaged: _____

Explanation:

(4 marks)

Question 15

Describe the ethical principle of beneficence.

(2 marks)

Question 16

Using EEG, EMG and EOG readings, indicate the difference between being awake and being drowsy.

AWAKE		DROWSY	
EEG		EEG	
EMG		EMG	
EOG		EOG	

(3 marks)

Question 17

Your best friend, who is also studying VCE Psychology, wants to stay awake with little sleep over the last 3 days prior to her mid-year exam. This is due to her perceived “running out of time”. From your understanding of sleep deprivation, what advice and explanation might you give her?

(2 marks)

Question 18

Define and give an example of context-dependent cues.

(3 marks)

Question 19

Using an example, define the following two types of interference.

a. Retroactive interference

(2 marks)

b. Proactive interference

(2 marks)

End of Section B

(10 marks)

End of Section C

End of Practice Exam

Suggested Answers

VCE Psychology 2013 Year 12 Practice Exam Unit 3

SECTION A – Multiple Choice Answers

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

SECTION B – Short Answer (Answers)

Question 1

- a. A RMD is an experiment where the same group of participants makes up both groups i.e. experimental and control in the experiment (**1 mark**).
- b. **Any** of the following advantages for (**1 mark**).
- There are minimal differences in personality characteristics between the experimental and control groups.
 - This experimental design controls individual characteristics such as memory recall and even participant expectations as the same participants are used in all conditions.
 - Many participant variables are controlled.
 - Fewer participants are required for the study.
 - It is more time efficient.
 - It is more cost effective.
- c. Counterbalancing is where half the participants are exposed to the control condition first and the other half are exposed to the experimental condition first (**1 mark**). This is to counteract the “order effect” which occurs when prior knowledge of a task or situation influences the performance of the participant and therefore the results of the experiment (**1 mark**).

Question 2

Due to a P-plate driver obviously having very little experience, the process of driving and the use of a mobile phone can both be considered controlled processes (**1 mark**), and therefore they are unable to divide their attention between the two (**1 mark**).

Question 3

A person in deep sleep will be in either stage 3 or 4 and will experience delta waves which are low frequency and high amplitude (**1 mark**), whereas REM sleep is a mixture of theta and beta waves and are irregular and low amplitude (**1 mark**).

Question 4

An EEG detects, amplifies and records the electrical activity of the brain in the form of brainwaves (**1 mark**).

Brainwaves that are high in frequency and low in amplitude (Beta brain waves) indicate that a person is awake and aware of their surroundings and therefore experiencing normal waking consciousness (**1 mark**).

Brainwaves that are low in frequency and high in amplitude (Delta brain waves) indicate that a person is asleep (NREM stage 3 or NREM stage 4) (**1 mark**).

Question 5

- a. Repeated Measures Design (**1 mark**).
- b. Either of: Order effect, Practise Effect, Boredom Effect or Carry-over Effect (**1 mark**).
- c. Professor Shrink could use counterbalancing (**1 mark**). This would involve dividing the sample into two groups. Group 1 would experience the control condition first, followed by the experimental condition. Group 2 would experience the experimental condition first, followed by the control condition (**1 mark**).

Question 6

Encoding - Firstly, Chelsea will be required to encode (convert) the information that she is learning into a useable form that can be stored in memory (**1 mark**).

Storage – Once the information has been encoded into a useable form, Chelsea will be required to store the information in memory until it is needed (at the time of her examination) (**1 mark**).

Retrieval – Chelsea will be required to locate and access the information regarding the computer course that is stored in memory so that it can be used when completing her examination (**1 mark**).

Question 7

Either one of the following for (**1 mark**)

- Lack of motivation.
- Loss of confidence.
- Inability to access information from LTM.
- Slowing of the central nervous system.

Question 8

During consolidation, a memory is made “solid”, meaning it is formed in a relatively permanent way in long term memory. According to consolidation theory, it takes approximately 30 minutes for a new memory to be transferred from short term memory to storage in long term memory (**1 mark**). As Nathan was only 10 minutes into the race prior to him falling unconscious, his STM did not have the 30 minutes requirement of “solidifying” his experience, and him falling into unconsciousness interrupted this process, causing him to lose it altogether (**1 mark**).

Question 9

- a. Stratified Sampling (1 mark).
- b. While still using random sampling, each ethnic group would need to be represented (1 mark). The ethnic groups would need to be represented in the same proportions as they occur in the school population (1 mark).

Question 10

To coordinate and integrate all incoming neural information (1 mark) and to start any messages that are to be sent to the various parts of the body (1 mark).

Question 11

Any two of the following for (2 marks):

A shortened attention span, impaired perceptions, impaired thinking, impaired memory, deterioration in performing complex tasks, slower reaction times, reduced self awareness, problems with voluntary muscular control and fine movements, impaired emotional awareness, impaired perception of time, diminished self control and other similar answers.

Question 12

Information will be retained only briefly if processed at a **shallow** level, but retained much longer if processed at a **deeper** level. (1 mark - terms **shallow** and **deeper** *must* be used). Elaborative rehearsal involves deep processing as meaning is given to the information which makes it more relevant (1 mark).

Question 13

The sensitivity of a measure of retention refers to its ability to assess the amount of information that has been stored in memory (1 mark). Relearning is the most sensitive as it can detect information that has been learned and stored in memory at some stage in the past (1 mark).

Question 14

Samantha:

Area of brain damaged: Broca's area (1 mark).

Explanation: Responsible for coordinating the movement of the muscles for speech – therefore short, basic sentences (1 mark).

Steven:

Area of brain damaged: Wernicke's area (1 mark).

Explanation: Responsible for processing auditory information and interpreting human speech, therefore fluent but jumbled (1 mark).

Question 15

That research must be designed to maximize any benefits to participants and society (1 mark) and that participants must be protected from any possible harm that may arise during the research (1 mark).

Question 16

AWAKE		DROWSY	
EEG	Beta, high frequency, low amplitude	EEG	Alpha, medium frequency, medium amplitude
EMG	High/moderate	EMG	Muscle relaxation
EOG	Few or many eye movements	EOG	Slow, gentle rolling eye movements

(One mark for each fully correct row. Maximum of 3 marks).

Question 17

As sleep deprivation is being deprived of the necessary or desired amounts of sleep, there can be psychological and physiological effects. She may suffer the inability to concentrate and pay attention, which won't help with her study, and staying alert and following simple instructions may be difficult (1 mark).

In terms of physiological problems, she may suffer from trembling hands (hard to understand writing), drooping eyelids (not reading properly) or staring (not finishing the paper) (1 mark).

Question 18

A cue that aids retrieval, involving the particular external setting or surroundings where the memory was formed (2 marks). For example, remembering that Christmas Day 2008 was a sunny day, the relatives that were present for lunch and the presents you received (1 mark for a similar example).

Question 19

- Retroactive interference – The tendency for new information to interfere with the retrieval of previously learnt information (1 mark). For example, a teacher learning new students' names interferes with the teacher's recall of previous students' names (1 mark).
- Proactive interference – When previously learned information interferes with the retrieval of newly learned information (1 mark). For example, if someone gives you a telephone number, you may be able to recall it later but this will become more difficult as more people give you their numbers (1 mark).

SECTION C – Extended Response Answers

Question 1

Most adults sleep for around 8 hours, progressing through sleep cycles every 90 minutes **(1 mark)**. The deeper sleep (NREM stages 3+4) tends to occur earlier in the sleep cycle, while periods of REM sleep occur approximately every 90 minutes **(1 mark)**. The duration of REM sleep progressively increases as the night continues, starting at around 10 minutes and ending with around 30 minutes. Deeper sleep decreases as the night continues **(1 mark)**. Due to Jayne's intensive physical workout, students need to comment that more time will be spent in NREM sleep, due to the physical nature of her day and the body's need to repair **(1 mark)**. The physiological patterns of REM sleep differ in the following ways from other stages of sleep:

Erratic, high frequency/low amplitude brain activity similar to being awake **(1 mark)**.

Increased electrical activities of the muscles surrounding the eye **(1 mark)**.

Very little electrical activity in body muscles (atonia) **(1 mark)**.

An increase in a number of physiological functions, such as breathing, heart rate etc **(1 mark)**.

To determine whether a person is experiencing REM sleep, an EEG and an EOG can be used. As the brain gives off tiny electrical signals indicating separate stages of sleep, the EEG amplifies and records these signals, allowing identification of a particular strength of signal indicating a particular stage of sleep **(1 mark)**. The eye is similar to a small battery with both negative and positive charges. Electrodes placed on the skin near the eye (EOG) record the change between the positives and negatives as the eye rotates in its socket, therefore identifying the amount of movement of the eye and therefore a particular stage of sleep **(1 mark)**.

End of Suggested Answers