

STUDENT NAME:

VCE PSYCHOLOGY 2020

UNIT 3 & 4 TRAIL EXAMINATION

QUESTION AND ANSWER BOOK

Structure of book
Reading time: 15 minutes
Writing time: 2 hours and 30 minutes

Section	Number of questions	Number of questions to be answered	Number of marks
A: Multiple Choice	50	50	50
B: Short Answers	8	8	70
TOTAL	58	58	120

- Students are permitted to bring into the examination room: pens, pencils, highlighters, erasers, sharpeners and rulers.
- Students are NOT permitted to bring into the examination room: blank sheets of paper and/or white out liquid/tape.
- No calculator is allowed in this examination.
- Students are not permitted to bring into the examination a mobile phone, electronic devices or wear a smart watch.

Materials supplied

- Question and answer booklet of 23 pages

Instructions

- Write your **student name** in the space provided above on this page.

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VCE Psychology 2020
Unit 3 & 4 Trial Examination
Multiple Choice Answer Sheet

Name: _____

Answer each question by placing a cross (x) in the appropriate square.

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Section A – Multiple Choice Questions

Question 1

When the action potential reaches the end of a nerve, a neurotransmitter is released into the synapse. The neurotransmitter will

- A. bind to the receptor with the same distinct chemical shape as the neurotransmitter on the axon terminal
- B. always be excitatory
- C. be received by the soma of the pre-synaptic neuron
- D. bind to dendritic receptors

Question 2

The Government is considering substantially increasing the fine for Victorian drivers using their mobile phone whilst driving their car. The number of people involved in accidents while texting and/or talking on their phone has increased significantly. Using a phone whilst driving is considered dangerous because

- A. driving a car is a controlled process requiring fully focused attention whereas using a mobile phone whilst driving is an automatic process
- B. driving a car is an automatic process requiring fully focused attention whereas using a mobile phone whilst driving is a controlled process
- C. it is difficult to divide your attention when performing two controlled processes
- D. driving a car and using a mobile phone both require a high level of awareness, minimal attention and a high mental effort.

Question 3

Mary learned how to play the piano when she was five years old. She stopped playing when she was seven years old. When Mary was eighteen, she tried to play the piano again but discovered that she struggled to reproduce the skills that she had when she last played the piano. Her friend stated that it was due to LTD. Which of the following best describes what occurs when LTD takes place?

- A. there is a weakening of the synaptic connections though lack of use
- B. synaptic plasticity has taken place
- C. the neuron's forming Mary's explicit memory have weakened.
- D. the lack of stimulation and release of neurotransmitter between the pre and post synaptic neurons has weakened the synaptic connections

Question 4

Which of the following statements about the sympathetic nervous system is correct?

- A. it allows the relay of sensory information to the CNS from the sensory receptors
- B. it allows the initiation of our survival mechanism
- C. it is responsible for controlling all of our muscles
- D. it is considered an unconscious process

Question 5

Parkinson's disease has no known cure although some medications can reduce the severity of the symptoms. Parkinson's Disease is thought to be the result of

- A. a degeneration of neurons in the CNS resulting in a loss of reflexes
- B. the degeneration of neurons in the substantia nigra which decreases glutamate levels
- C. a reduction in dopamine levels
- D. a degeneration of neurons in the motor cortex

Question 6

Nervous information is passed from the pre-synaptic nerve to the post-synaptic nerve. The part of the post-synaptic nerve that receives this nervous information is the

- A. myelin sheath
- B. axon terminal
- C. terminal buttons
- D. receptors on the dendrites

Use the following information to answer Questions 7, 8 and 9.

Belinda and Dawn were good friends who were both trying out for the Victorian U19 Netball team. The selection process was lengthy and involved several weeks of tryouts, training sessions and practice games. Both girls found the process quite stressful. At the end of each week, all of the girls would line up and the coach would read out the names of the girls who had been eliminated from the process.

Question 7

Which of the following physiological responses is likely to occur at the time when the coach is reading out the names of the girls who have been eliminated?

- A. contraction of the bladder
- B. an increase in salivation
- C. constricted pupils
- D. inhibition of digestion

Question 8

After a few weeks of the process, Dawn began to develop some flu like symptoms. One possible explanation for this would be that

- A. Dawn's blood cortisol levels had remained low for some period of time
- B. Dawn is in the resistance stage of the General Adaptation Syndrome
- C. Dawn was experiencing countershock
- D. Dawn's primary appraisal was different to that of Belinda's

Question 9

The source of stress for both Belinda and Dawn could be best categorised as being

- A. a life event
- B. acculturative stress
- C. emotion focused
- D. a daily pressure

Use the following information to answer Questions 10 and 11.

When Andrew was 4 years of age, he was bitten by a dog whilst playing at the park. Since that time, Andrew has avoided going near any park or any other place where a dog may be present. He was now fearful of all dogs and was scared that he would be bitten again by a dog.

Question 10

This scenario can be best described as

- A. Andrew's fear response being precipitated by classical conditioning and perpetuated by operant conditioning and positive reinforcement
- B. Andrew's fear response being precipitated by operant conditioning and perpetuated by classical conditioning and positive reinforcement
- C. Andrew's fear response being precipitated by classical conditioning and perpetuated by operant conditioning and negative reinforcement
- D. Andrew's fear response being precipitated by operant conditioning and perpetuated by classical conditioning and negative reinforcement

Question 11

The fact that Andrew is scared of all dogs is an example of

- A. stimulus discrimination
- B. stimulus generalisation
- C. a NS becoming a CR
- D. the failure of associating the stimuli with the appropriate response

Question 12

One of the main differences between classical and operant conditioning is that

- A. acquisition occurs in classical conditioning but not operant conditioning
- B. classical conditioning involves active learning whereas operant conditioning involves passive learning
- C. punishment is used in operant conditioning but not in classical conditioning
- D. stimulus generalisation occurs in classical conditioning but not in operant conditioning

Question 13

Gary was not paying attention at school and as a result his grades began to fall. His parents took away his mobile phone and said they would not return it until his grades had improved. Having his phone taken from him is best described as his parents using

- A. punishment
- B. response cost
- C. negative reinforcement
- D. positive punishment

Question 14

From the work of Albert Bandura, certain elements of observational learning were identified. It is considered that these elements should be present in order for learning to occur. Which of the following statements regarding the elements of observational learning is incorrect?

- A. learners need to be able to form memories of what was observed in order to reproduce the behaviour
- B. the learner has to actively pay attention to the behaviour being observed
- C. the learner needs to have the necessary skills to be able to reproduce the behaviour
- D. the learner must have the motivation to learn the behaviour

Question 15

Megan was sitting in her family room when her mother called out to her that her dinner was ready. Megan replied “pardon” to her mother. However, before her mother could respond again, Megan called out and said “It’s all right. I’m coming. This scenario can be best described as Megan using her

- A. STM
- B. echoic memory
- C. sensory memory
- D. iconic memory

Question 16

Atkinson-Shiffrin proposed the multi store model of memory. Which of the following statements about their model of memory is incorrect?

- A. information can only enter STM by paying attention to the information in sensory memory
- B. STM has a limited capacity compared to the LTM
- C. iconic memory temporarily stores our visual images
- D. rehearsal will enable information to pass from STM to LTM

Question 17

Sally's grandmother was suffering from Alzheimer's disease. Which of the following statements about Sally's grandmother is most likely to be incorrect?

- A. she may suffer from anterograde amnesia
- B. amyloid plaques will be present in her brain
- C. a course of benzodiazepines will cure her condition
- D. neurons in the hippocampus will degenerate

Question 18

Greg suffered brain damage as a result of a car accident. Doctors determined that Greg had damage to the hippocampus. As a result of this damage, it is possible that Greg will

- A. find it difficult to recall implicit memories
- B. be unable to retain information in his STM
- C. have difficulty forming new episodic memories
- D. both B and C

Question 19

Research indicates that the amygdale is responsible for

- A. learning new implicit procedural responses
- B. the formation of classically conditioned fear responses
- C. producing adrenaline to form emotional memories
- D. a reduction of the recency effect when information is delayed by more than 30 seconds

Question 20

Many people in Australia suffer from Parkinson's disease. For someone suffering from this disease, which of the following statements is least likely to be correct?

- A. there would be a degeneration of neurons in the substantia nigra
- B. they would find it difficult to maintain fine motor control
- C. they would only experience motor symptoms of the disease
- D. they would experience a decrease in dopamine levels

Questions 21, 22 and 23 refer to the information below

Gary's son, John, was about to start Year 7 at his local high school which required students to wear a tie. Gary was demonstrating to John how to do up a tie. At the beginning, John made numerous attempts to do up his tie without much success. However, after a couple of weeks Gary noticed that John was able to walk around the house and have a conversation whilst he did up his tie.

Question 21

At first John was unsuccessful in doing up his tie. An explanation for this is that

- A. at first the task was an automatic process and required fully focused attention
- B. at first the task was a controlled process requiring little mental effort
- C. at first the task was an automatic process and required little mental effort
- D. at first the task was a controlled process and required fully focused attention

Question 22

John being able to walk around the house and have a conversation whilst he did up his tie is an example of

- A. selective attention and NWC
- B. divided attention
- C. focused attention
- D. desensitisation

Question 23

In terms of observational learning, the element of motivation is best described as John

- A. being motivated to learn the behaviour
- B. having the skills to perform the behaviour
- C. being motivated to perform the behaviour
- D. forming a mental representation of the behaviour

Question 24

Researchers can use various tools to measure physiological responses which help indicate a particular state of consciousness. Other techniques such as sleep diaries and video monitoring can also be used. Which of the following statements about these tools is incorrect?

- A. an EEG will detect, amplify and record the electrical activity of the brain in the form of brain waves
- B. an EOG will detect, amplify and record the electrical activity of the muscles in the eye
- C. a sleep diary is a useful qualitative research tool in researching people with sleep problems
- D. using video monitoring to research those with sleep problems avoids the artificiality associated with a sleep laboratory

Question 25

Belinda witnessed a traumatic incident at a local hotel. Three weeks later, her husband suggested that they go to the hotel for dinner. Belinda became quite emotional at this suggestion and found that she started to recollect the incident. Her recollection of the incident can be best explained because

- A. of the context dependent cues where Belinda's emotions were providing retrieval cues assisting her recollection of the incident
- B. of the state dependent cues where the environment was providing retrieval cues assisting her recollection of the incident
- C. of the context dependent cues where the environment was providing retrieval cues assisting her recollection of the incident
- D. of the state dependent cues where Belinda's internal state was providing retrieval cues assisting her recollection of the incident

Question 26

Barry was playing football when he was knocked unconscious. When he regained consciousness, the head trainer wanted to determine if Barry was experiencing any perceptual distortions. Which of the following questions would be most appropriate for the head trainer to ask Barry to determine if he was experiencing any perceptual distortions?

- A. what team were we playing?
- B. where do you live?
- C. how many fingers am I holding up?
- D. how long have you been unconscious for?

Question 27

Mason is a 17-year-old VCE student completing Year 12. When considering a typical night's sleep for Mason, which of the following statements is least likely to be correct?

- A. in terms of total sleep, Mason will spend more time in REM sleep compared to NREM
- B. it is possible that Mason will only experience stage 3 and 4 NREM sleep in the first two sleep cycles
- C. with each cycle of sleep Mason will experience an increase in the time spent in REM sleep
- D. Mason will not feel sleepy until later in the evening compared to his parents

Question 28

Which of the following statements is more applicable as evidence for the restorative theory of sleep?

- A. REM sleep is important for the restoration and energy replenishment of our skeletal muscles
- B. sleep can enhance our mood
- C. different species have different sleep patterns
- D. babies can spend up to 90% of their sleep in REM sleep

Question 29

Rodney and Jacob are consultants for an engineering firm in Melbourne. Their work requires a considerable amount of travel. Rodney was required to fly west to a country that was 6 hours behind Melbourne time. On the same day, and at the same time, Jacob was required to fly east to a country that was 6 hours ahead of the time in Melbourne. In terms of both Rodney and Jacob falling asleep, which of the following statements is most accurate?

- A. both Rodney and Jacob will have no difficulty falling asleep.
- B. Rodney will find it easier fall asleep because it is easier to adapt to a longer day than a shorter day
- C. Jacob will find it easier to fall asleep because it is easier to adapt to a shorter day than a longer day
- D. both Rodney and Jacob will have difficulty falling asleep.

Question 30

Harry was going through a divorce which was proving to be a stressful experience. He was not sleeping well at night and was suffering from sleep deprivation. His work colleagues commented that he was more irritable than usual in his workplace. This change is best explained by sleep deprivation affecting Harry's

- A. behavioural functioning
- B. cognitive functioning
- C. affective functioning
- D. all of the above

Question 31

Sally noticed that her father was starting to become sleepy much earlier in the night. She suggested to her father that he was suffering from an advanced sleep-wake phase disorder. When considering a remedy for the situation, it is likely that Sally would have suggested that her father

- A. become calm in the evening by promoting theta brain wave activity through the use of a medication that mimicked cortisol.
- B. use bright light therapy early in the evening to influence melatonin secretion from the pineal gland
- C. use bright light therapy early in the morning to influence melatonin secretion from the pineal gland
- D. see a doctor and request to be placed on depressant medication

Question 32

Which of the following is not considered to be a circadian phase disorder?

- A. jet lag
- B. sleep onset insomnia
- C. shift work
- D. the sleep wake shift in adolescents

Question 33

Australian road laws have strict rules regarding the consumption of alcohol and driving any form of motor vehicle. A blood alcohol content of 0.05 is considered the upper limit of alcohol consumption and drivers will be charged with drink driving if they have this level of alcohol in their blood. The rules involving alcohol and driving motor vehicles are strict because

- A. alcohol is a stimulant and a blood alcohol content of 0.05 is has a similar effect to that of a period of sleep deprivation for 17 hours.
- B. alcohol is a stimulant and a blood alcohol content of 0.05 is has a similar effect to that of a period of sleep deprivation for 24 hours.
- C. alcohol is a depressant and a blood alcohol content of 0.05 is has a similar effect to that of a period of sleep deprivation for 17 hours.
- D. alcohol is a depressant and a blood alcohol content of 0.05 is has a similar effect to that of a period of sleep deprivation for 24 hours.

Question 34

Julie had her sleep patterns studied in a sleep laboratory. Which of the following is an example of using a quantitative and qualitative measure respectively that could be used to indicate Julie's state of consciousness.

- A. EOG and sleep diary
- B. EMG and EEG
- C. EOG and EMG
- D. sleep diary and video monitoring

Question 35

Marilyn was experiencing difficulty in forming and consolidating new declarative memories. Marilyn also suffered from insomnia. A possible explanation for her difficulty in forming and consolidating new declarative memories could be a disruption of her

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

Question 36

Peter has just completed a marathon. That night when he goes to sleep, it is likely that Peter will spend more time in _____ sleep according to the _____ theory of sleep.

- A. REM; restorative
- B. REM; evolutionary
- C. NREM; restorative
- D. NREM; evolutionary

Question 37

One of the interventions for people suffering from a specific phobia is psychoeducation. Which of the following statements is inaccurate in regard to what psychoeducation involves?

- A. Psychoeducation helps the patient understand the nature and management of the illness
- B. Psychoeducation only involves the patient suffering from the specific phobia
- C. Psychoeducation helps reduce the stigma associated with the mental illness
- D. Psychoeducation involves challenging any unrealistic or anxious thoughts

Question 38

A researcher was examining the effects of sleep deprivation for a prolonged period of time. Participants in his study were deprived of sleep for a period of 10 days. It is likely that these participants

- A. would experience physiological effects for several days after the experiment ended
- B. would have no difficulty completing complex tasks but would find simple tasks more difficult to complete
- C. would not experience any psychological effects
- D. none of the above

Question 39

Which of the following is not considered to be a biological contributing factor in the development of specific phobia?

- A. GABA dysfunction
- B. memory bias
- C. the stress response
- D. long term potentiation

Questions 40, 41, and 42 refer to the information below

David has been separated from his wife for 6 months and he only sees his children every second weekend. During the Covid 19 crisis, David lost his job and had to apply to Centrelink in order to receive unemployment benefits. In addition, due to social distancing laws, David saw his children less often than every second weekend. He was anxious about missing out on too much of their growth and he feared that his relationship with them would be damaged. David was also paying a significant amount of rent as well as paying off his car. These factors were a cause of significant anxiety for David and were interfering with the functioning of his daily life. It was during this time that David was beginning to realise that he could no longer afford to smoke cigarettes and it would benefit him if he quit smoking.

Question 40

Which of the following best indicates that David was experiencing anxiety rather than stress?

- A. he was not functioning well in his daily life
- B. he had lost his job and needed unemployment benefits
- C. he realised he could no longer afford to smoke
- D. he was seeing less of his children

Question 41

Which of the following would be a biologically based intervention to help David deal with his current situation?

- A. CBT
- B. systematic desensitisation
- C. breathing retraining
- D. using a benzodiazepine such as a glutamate agonist

Question 42

Given that mental health is considered to exist along a continuum, David's situation provides an example of how mental health can fluctuate

- A. when external factors are far more significant than internal factors
- B. when internal factors are far more significant than external factors
- C. due to impaired reasoning and memory
- D. depending on internal and external factors

Question 43

Susan was diagnosed with a specific phobia. Her friend suggested that she would benefit from undertaking CBT. Which of the following is most likely to be a strategy used during CBT?

- A. organising a hierarchy of fears from least to most fearful
- B. challenging unrealistic thoughts
- C. progressive muscle relaxation
- D. educating family and friends

Question 44

There are numerous situations in life that can lead to stress and/or anxiety for many people even though these situations are a normal part of everyday life. Anxiety disorders are a particular group of mental health disorders. Which of the following statements is most likely indicative of someone suffering from an anxiety disorder?

- A. a student feels nervous prior to completing an exam
- B. a driver reduces their speed on a slippery road
- C. a high level of cortisol is present in the bloodstream indicating a person is in the resistance stage of the General Adaptation Syndrome
- D. a person has feelings of insecurity that interferes with everyday functioning

Question 45

Resilience can be thought of as a positive adaptation to adversity. Which of the following would not be considered a protective factor in the maintenance of mental health?

- A. an adequate diet
- B. systematic desensitisation
- C. cognitive behavioural strategies
- D. support from family and friends

Questions 46, 47, 48, 49 and 50 refer to the information below

Professor McNab wanted to investigate the effect of caffeine on REM sleep patterns across various age groups. He placed an advertisement for participants and from those who answered the advertisement he subdivided them into those that were aged 20-25, 26-30, 31-35, 36-40, 41-45, 46-50. Participants were required to come into a sleep laboratory each evening. They were then given various amounts of caffeine and an EEG, EMG and EOG was used to record their sleep patterns. An increase in REM sleep was scored as a positive increase and a decrease in REM sleep was scored as a decrease in REM sleep. The study was conducted over a period of 6 weeks and the results are outlined in the table below.

Age Group	Mean Change in REM sleep
20-25	+6.3%
26-30	+6.0%
31-55	+4.2%
36-40	+3.1%
41-45	+2.7%
46-50	+1.6%

Question 46

The types of study design used by Professor McNab was

- A. independent groups
- B. cross-sectional
- C. stratified random design
- D. repeated measures

Question 47

With regard to the experimental design used by Professor McNab, which of the following is most likely to have occurred?

- A. the collection of quantitative data
- B. counterbalancing
- C. the control of all confounding variables
- D. all of the above

Question 48

In this research, the dependent variable was

- A. the various levels of caffeine
- B. changes in REM sleep
- C. the age group
- D. the 6-week time period

Question 49

A possible confounding variable in this study is

- A. the different age groups of the participants
- B. non-standardised instructions and procedures
- C. caffeine consumed during the day
- D. not including the measure of standard deviation in the results.

Question 50

Professor McNab wanted to make a generalisation from the results obtained. Which of the following statements is most appropriate in terms of generalising these results to the population?

- A. people aged between 20 and 30 should consume caffeine to increase REM sleep and enhance the consolidation of memories
- B. people above the age of 40 experience less disruption to REM sleep as they have all consumed caffeine for many years and have developed a tolerance to the effects of caffeine
- C. it is difficult to generalise these results due to the presence of many extraneous variables
- D. everyone should consume caffeine to enhance REM sleep

Section B - Short Answer Questions

Question 1 (5 marks)

A teacher noted that one of his students became excited far too easily. In addition, the student also struggled to sit still and maintain attention. Using your knowledge of neurotransmitters in regulating the arousal levels of the central nervous system (CNS), provide a possible explanation for this situation. In your response, suggest a possible medication that may remedy the situation.

Question 2 (8 marks)

Tom had been employed at a national electronics company for a period of 15 years when he was appointed to the position of General Manager of the company. At the same time a new Chief Executive Officer (CEO) was appointed to take control of the company. Tom had been in the position for 6 months when he noticed that he was frequently getting headaches which was odd because he had never suffered from headaches previously. In addition, he also started to get colds and infections more easily than he ever had before. Tom and the new CEO were in conflict almost immediately from the time the new appointments were made. The overall profit had begun to fall and the CEO was apportioning all of the blame onto Tom for the company's performance. This pressure also led to Tom having to make tough decision in regards to the employment of work colleagues who were also his friends. The problems at work carried over to his family life and Tom realised that he was arguing with his wife far more often than had taken place in the past.

- a. Using a model of stress, outline a possible explanation for Tom's headaches, colds and infections. (3 marks)

- b. Outline the source of stress being experienced by Tom. Justify your response. (2 marks)

- c. Tom's best friend suggested that he take up an exercise class to help with the situation. Outline three reasons how exercise may benefit the stress experienced by Tom. (3 marks)

Question 3 (8 marks)

Karen had only just qualified as a paramedic when she was required to provide assistance at a car accident. This particular accident was quite traumatic and it had a profound emotional effect on Karen. She found that in the days following the accident she kept replaying in her mind certain images of the accident. When recalling these images, Karen found that she also became quite emotional.

- a. Explain what is meant by the term neural plasticity. (2 marks)

- b. Using the concept of neural plasticity and the process involved, explain what is occurring when Karen keeps replaying in her mind images of the accident. (3 marks)

- c. This event was an emotionally arousing experience for Karen. Outline the role of adrenaline in consolidating the memory of this event. (3 marks)

Question 4 (8 marks)

Peter's grandmother was suffering from Alzheimer's disease to the point where she had extreme difficulty forming any new explicit memories. However, she was able to recall some older memories and had no difficulty knitting which was one of her favourite hobbies.

- a. What term is used to describe the inability to form new explicit memories? (1 mark)

- b. What is Alzheimer's disease? In terms of brain structures and neural pathways, explain what is most likely to have occurred in the brain of Peter's grandmother that prevents her from forming new explicit memories. (4 marks)

- c. What is a possible explanation for Peter's grandmother being able to recall some older memories. (1 mark)

- d. Provide an explanation as to why Peter's grandmother did not experience any difficulty knitting. (2 marks)

Question 5 (12 marks)

Harry was a Year 12 Psychology student who wanted to investigate if different retrieval methods impacted on the amount of information that could be detected in memory. He asked the Year 11 Biology teacher, Mr Adams, if he could assist him in conducting the study and Mr Adams agreed. There were two Year 11 Biology classes and Harry asked Mr Adams if he could teach a particular unit and then devise two different types of tests. One of the tests would contain multiple choice questions and the other test would be a series of written questions. Mr Adams taught a unit on Photosynthesis that lasted for 4 weeks. At the end of the unit, Class A completed a series of multiple choice questions on Photosynthesis and Class B completed a series of written questions. On the day of the test, Class B had to complete the test in the school stadium rather than their usual science room because there was a gas leak in the science room.

- a. What type of research design was used by Harry and Mr Adams? (1 mark)

- b. Write a hypothesis for this research. (2 marks)

c. Which class do you think would perform better on the test? Justify your response. (4 marks)

d. What is a possible confounding variable that exists by using the two different Biology classes in this study. What research design would you use to counter this confounding variable. (2 marks)

e. How might the scores have been impacted because Class A did their test in their normal science room whereas Class B had to sit their test in the school stadium. Justify your response. (3 marks)

Question 6 (9 marks)

Joyce was watching her son, Russell, play basketball in an U14 tournament. She noticed that when Russell was dribbling the ball down the court, he had a tendency to keep watching the ball as he was dribbling. Luke, who was one of Russell's team mates did not look at the ball at all when dribbling and he was able to watch where his team mates and opponents were whilst he was dribbling. Just before half time, Russell took a heavy fall and hit his head on the floor. He lost consciousness for a brief period of time and was taken to the hospital.

- a. In terms of controlled and automatic processes, explain the differences between the dribbling abilities of Russell and Luke in this scenario. (3 marks)

- b. When Russell was at the hospital, the Doctor that examined him was concerned that he may have been in an ASC. The Doctor wanted to determine if Russell was experiencing any cognitive or perceptual distortions. What is the difference between a cognitive distortion and a perceptual distortion? In your response, include a question that the Doctor may have asked Russell to determine if he did have any cognitive or perceptual distortions. (4 marks)

- c. Name and describe a device the Doctor could use to measure a physiological response of Russell. (2 marks)

Question 7 (10 marks)

Gary was a Year 11 student completing his VCE. His younger brother Phillip was 11 years old and in Grade 5. Recently, Gary had been arguing with his mother and father almost every night. They were demanding that Gary go to sleep at 10:30pm and refused to take any notice of Gary when he said he was not tired. Gary's parents kept comparing him to his younger brother outlining that Phillip was always sound asleep by 10:00pm every night. On a Sunday, Gary would sleep in very late often not getting up until around 1:00pm.

- a. Using correct psychological terms, how would you explain to Gary's parents that he is most likely telling the truth and that he is not tired at 10:30pm when they say he must go to bed. (2 marks)

- b. Explain how bright light therapy could be used to alleviate Gary's problem of not being tired at 10:30pm. (2 marks)

- c. Most schools require students to be present by 8:30-8:45am. Some schools are beginning to investigate starting classes later in the morning such as 10:30am, for example. Discuss Gary's situation and why it may be beneficial to start school at a later time. Include in your response any issues with Gary sleeping in on a Sunday. (6 marks)

Question 8 (10 marks)

Daniel was 7 years old when he having a picnic with his family at a local park. He was stung by a bee at the park and he had a severe allergic reaction to the bee sting which caused him considerable pain. As a result, Daniel has developed a phobia and is now fearful of most flying insects and he refuses to go anywhere near a park. Daniel is also reluctant to venture outside his house to the backyard or front garden. He spends most of the time in his room playing video games. At school Daniel sits in the library at recess and lunchtime.

You are a psychologist and Daniel's parents have brought him to you seeking assistance for his phobia as it is disrupting his ability to function daily. It is your responsibility to discuss the situation with Daniel's parents and outline any possible treatments. In the space below and using correct psychological terminology, outline the factors that you would discuss in this situation. Include in your response the following;

- What is meant by a biopsychosocial approach to explain a specific phobia
- How Daniel's phobia was precipitated by classical conditioning and how he perpetuates it by operant conditioning
- The role of long term potentiation
- Using evidence based interventions for those with specific phobia, briefly outline one biological based, one psychological based and one social based intervention that can be used.

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END OF QUESTION AND ANSWER BOOK