**TRIALS FOR TEACHERS.**

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**2019**

**TRIAL EXAMINATION**

**VCE PSYCHOLOGY**

**UNITS 3 & 4**

**INSTRUCTIONS**

Reading Time - 15 minutes

Writing time - 150 minutes

**SECTION A**

Multiple Choice questions 50 questions 1 mark each 50 Marks

Answer the multiple choice questions on the answer sheet provided.

**SECTION B**

Short answer questions - 14 Short answer questions – 70 marks

**TOTAL** 120 marks

Answer the short answer questions and the extended answer question in this booklet.

**IMPORTANT NOTES**

* THIS PRACTICE EXAMINATION WAS CONSTRUCTED AND REVIEWED BY EXPERIENCED TEACHERS OF VCE PSYCHOLOGY. IT HAS NO OFFICIAL STATUS.
* NO TEACHER WHO HAS CONTRIBUTED TO THIS PAPER BY SETTING OR REVIEWING QUESTIONS HAS HAD ANY CONNECTION WITH THE VCAA PANEL INVOLVED IN SETTING THE VCAA EXAMINATION FOR UNIT 3 & 4 PSYCHOLOGY OCTOBER/NOVEMBER 2019.
* QUESTIONS IN THIS PAPER ARE ORIGINAL EXAMPLES, BASED ON THE TYPE OF QUESTIONS THAT HAVE APPEARED IN PREVIOUS VCE EXAMINATIONS
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**Section A – Multiple choice questions**

**Questions 1, 2 and 3 refer to the following information**

Annie is shopping for material to make a bridesmaid’s dress. She strokes a satin material and loves the smooth feel of it. Having decided on this material, she looks for a suitable colour.

**Question 1**

Which divisions of the nervous system would she be using when she was assessing the texture of the material?

1. Central Nervous System and Somatic Nervous System.
2. Central Nervous System and Motor Nervous System only.
3. Sensory Nervous System and Autonomic Nervous System.
4. Central Nervous System and Sensory Nervous System only.

**Question 2**

Which divisions of the nervous system would she be using when she was assessing the colour of the material?

1. Central Nervous System and Somatic Nervous System.
2. Central Nervous System only.
3. Sensory Nervous System and Autonomic Nervous System.
4. Central Nervous System and Sensory Nervous System only.

**Question 3**

Annie begins to feel excited at the prospect of being a bridesmaid, choosing the material has made it real for her. Which of the following responses are likely to be occurring for Annie?

1. Her heart-rate increases and her pupils dilate.
2. Her breathing-rate increases and air-passages contract.
3. Her breathing-rate decreases and release of cortisol increases.
4. Her heart-rate increases and release of cortisol decreases.

**Question 4**

Stu received a blow on the head when he fell from his bike. MRI scans revealed damage to his cerebral cortex in the frontal lobes. Which of the following impairments may Stu experience?

1. Lack of sensation in his body and blurred vision.
2. Difficulty with controlling movement of his body and difficulty with planning and organisation.
3. Difficulty with hearing and lack of feeling in his hands.
4. Difficulty with recognising his friends and lack of ability to smell.

**Questions 5 & 6 refer to the information below**

Jo is a psychology teacher who is studying for her Master’s in Psychology. She is researching the effects of sleep deprivation on student performance in tests. She is using members of the three Units 1 & 2 VCE Psychology classes as participants. She has received ethics approval for the study.

She advises participants that they do not need to take part unless they wish to and that they may discontinue their involvement at any stage. She gets them to sign a document indicating that they are willing to participate and assures them that no identifying information will be included in the report.

**Question 5**

What form of sampling has Jo used in this case?

1. Stratified sample.
2. Random sample.
3. Convenience sample.
4. Stratified random sample.

**Question 6**

Jo knows that a double-blind design is useful to eliminate experimenter and participant expectations. In this research she would find it possible to use a ‘blind’ design in order to eliminate

1. experimenter and participant expectations.
2. participant expectations only.
3. experimenter expectations only.
4. neither experimenter nor participant expectations.

**Question 7**

Which of the following is a **false** statement about neurotransmitters?

1. Some hormones are also neurotransmitters.
2. Neurotransmitters are created in the cell body (soma) of neurons.
3. One neurotransmitter may have excitatory or inhibitory effects but not both.
4. Glutamate is the major excitatory neurotransmitter.

**Question 8**

Parkinson’s Disease is characterized by uncontrollable tremors in the hands. This is thought to be due to

1. Deficiency of dopamine in the substantia nigra.
2. Deficiency of glutamate in the motor cortex.
3. Deficiency of acetylcholine in the parietal lobe.
4. Excessive cortisol in the bloodstream.

**Questions 9, 10 and 11 refer to the information below**

Jett passed his exams late last year and qualified as a Junior Doctor. For the last four months, working as an intern at a busy hospital, he has been working up to 80 hours per week and he still has to study when he goes home. As autumn turns to winter, he finds that he is suffering from frequent colds and despite having the ‘flu injection, he now has symptoms of influenza.

**Question 9**

Which of the following is a probable explanation for Jett’s health concerns?

1. Jett believes that the long work hours and reduced sleep will have a harmful effect on him.
2. Jett’s immune system functions less efficiently because it is being forced to eliminate hormones, especially cortisol, which are released during arousal.
3. Having coped with the initial stress of long work and sleeplessness, Jett’s ability to deal with new stressors is significantly reduced.
4. All of the above responses help explain Jett’s health concerns.

**Question 10**

Jett consults his mentor, a doctor who has been through the same experience. Together they plan a timetable that includes work, study and also meditation and exercise.

To Jett’s surprise, after a few weeks of this program he is managing to remain healthy and cope with all the demands of his life.

The strategies that Jett has used can be described as

1. avoidant strategies that are emotion-focused.
2. approach strategies that are emotion- and problem-focused
3. approach strategies that are problem-focused
4. avoidant strategies that are emotion- and problem-focused.

**Question 11**

Jett’s exercise program – part of this strategy – helps control his emotions because

1. Endorphins released into his bloodstream caused feelings of well-being.
2. The exercise, by raising his heart-rate, had increased the amount of oxygen and glucose available to his brain.
3. The exercise had reduced the levels of cortisol and adrenaline in his bloodstream.
4. All of the above helped reduce his level of anxiety.

**Question 12**

Acculturative stress is likely to be experienced by

1. any person having to adjust to the different social expectations and environmental factors in a new place of residence.
2. only persons who have earned the status of refugees
3. only persons who can be diagnosed with PTSD (post-traumatic stress disorder).
4. only children who are separated from their parents.

**Questions 13, 14 and 15 refer to the following information**

I **– Psychological effects**

II **– Physiological effects**

III **– Human subjects**

IV **– Animal subjects**

**Question 13**

Selye’s research involved

1. I and II and IV
2. II and III only
3. II and III and IV
4. II and IV only

**Question 14**

Lazarus and Folkman’s research involved

1. I and II and IV
2. I and III only
3. II and III and IV
4. II and IV only

**Question 15**

Appropriate research to develop understanding of the cause and nature of stress and its treatment would be likely to include investigation of

1. I, II and III
2. II and III only
3. I, II and IV
4. II, III and IV

**Questions 16 and 17 refer to the information below:**

Tran is ranked in the top ten table-tennis players in the country. He practises for several hours each day to make sure his performance is at the best of his potential. One day, on the way to training, he fell from his bike and broke his wrist! Although his physical recovery was complete within two months, he found that he required many more weeks of training to return to his previous standard of play.

**Question 16**

The neurological process that was involved in his original learning of the table-tennis skills was

1. long-term potentiation in which new neurons had been created.
2. long-term depression, in which unnecessary neurons had been destroyed (pruned).
3. long-term potentiation, in which new connections between neurons had been created.
4. long-term depression, in which unnecessary synapses had been destroyed (pruned).

**Question 17**

After his injury, Tran found that his skill had decreased.

The neurological process that may have contributed to his difficulty is

1. long-term potentiation, in which new connections between neurons have been created.
2. long-term depression, in which unused neurons have been destroyed (pruned).
3. long-term depression, in which unused synapses have been destroyed (pruned).
4. long-term potentiation in which new neurons have been created.

**Questions 18, 19 and 20 refer to the information below**

Roger always puts on his brown leather jacket before he goes outside and drives to the shops. Before leaving the house, he gives his dogs a dried meat treat. When he is going into the garden, he puts on his grey windcheater and the dogs come with him.

At first, whenever he put on any jacket, the dogs ran to the cupboard where the treats are stored, now, however, when he puts on the windcheater, the dogs run to the back door.

**Question 18**

The dogs running to the ‘treat cupboard’ when he puts on the leather jacket can be explained as

1. classical conditioning where putting on the jacket is the conditioned stimulus.
2. classical conditioning where opening the cupboard where the treats are stored is the unconditioned stimulus.
3. operant conditioning, where opening the cupboard where the treats are stored is the antecedent stimulus.
4. operant conditioning where putting on the jacket is the antecedent stimulus.

**Question 19**

Running to the ‘treat cupboard’ when Roger puts on the windcheater is an example of

1. Stimulus discrimination in classical conditioning
2. Stimulus discrimination in operant conditioning
3. Stimulus generalisation in classical conditioning
4. Stimulus generalisation in operant conditioning

**Question 20**

Running to the back door when Roger puts on the windcheater is an example of

1. Stimulus discrimination in classical conditioning.
2. Stimulus discrimination in operant conditioning.
3. Stimulus generalisation in classical conditioning.
4. Stimulus generalisation in operant conditioning.

**Questions 21, 22 and 23 refer to the following information**

Cho is having her 18th birthday in a few weeks. She is organizing a gathering on the day and wishes to invite all the people who performed in the Middle-School production of “The Lion, The Witch, and the Wardrobe”, in which she played Lucy, when she was in Year 8.

She tries to write out the cast-list, but she can’t recall the names of people who played some of the minor characters.

She asks her mother for help and her mother finds a photograph of the curtain call – when all characters are on stage taking the final bow.

Cho still has some difficulty because although she recognises the faces, she still can’t recall all the names. Her mother gives her a copy of the school magazine that lists all members of the middle school that year; Cho can soon remember which name fits which person in the cast.

**Question 21**

Which measure of retention was Cho using when she first tried to write out the cast list?

1. Recognition.
2. Cued recall.
3. Free recall.
4. Relearning.

**Question 22**

Which measure of retention was Cho using when she tried to write out the list using the photograph to help her recall?

1. Cued recall.
2. Free recall.
3. Recognition.
4. Relearning.

**Question 23**

Which measure of retention was Cho using when she was looking at the list of names and remembering who was in the play.

1. Recognition.
2. Relearning.
3. Free recall.
4. Cued recall.

**Question 24**

In the serial position effect, a list of words has been read to participants. Only the primacy effect is shown when they are asked to recall the words. It is most likely that participants have been asked to recall the words

1. immediately after learning; in the order in which they were presented.
2. with a 30 second delay after learning; in random order.
3. with a 30 second delay after learning; in the order in which they were presented.
4. immediately after learning; in random order.
5. I, II or III
6. II, III or IV
7. I, II or IV
8. I, III or IV

**Question 25**

The part of the temporal lobe most involved with attaching emotion to newly formed memories is the

1. hippocampus.
2. amygdala.
3. cortical area.
4. hypothalamus.

**Question 26**

According to the multi-store model of memory, explicit memories of previous experiences and well-learned facts are stored in long-term memory as

1. episodic memories.
2. semantic memories.
3. declarative memories.
4. procedural memories.

**Question 27**

One of the earliest symptoms of Alzheimer’s Disease is difficulty forming new memories. This is due to

1. damage to the amygdala causing anterograde amnesia.
2. damage to the amygdala causing retrograde amnesia.
3. damage to the hippocampus causing anterograde amnesia.
4. damage to the hippocampus causing retrograde amnesia.

**Question 28**

Eyewitness testimony is responsible for many convictions for serious crimes. In 2018 across the USA, 23 people who had been convicted on the basis of eyewitness testimony were found to be innocent when DNA evidence was analysed.

A major reason for the fallibility of eyewitness testimony is

1. the reconstructive nature of memory.
2. fabricated evidence.
3. misleading questions during the trial.
4. all of the above are common causes of failure.

**Question 29**

Lee has been on the day shift for the past three months but today she has been rostered on the evening shift as well. As a result of this, she realises that she has been awake for the last 17 hours. Knowing that her reflexes and judgement may be impaired, she is extremely watchful as she rides her bike home.

The extent of impairment Lee is experiencing would be approximately equivalent to having a blood-alcohol level of

1. .01.
2. .05.
3. .10.
4. 1.0.

**Question 30**

Lee’s employer had deliberately moved her from the day shift to the evening shift, what is the reason that the move to a later shift is preferred to a move to an earlier shift?

1. Her day is extended so that the change is more in line with her circadian cycles.
2. Her day is extended so that the change is more in line with her ultradian cycles.
3. Her day is extended so that the change is more in line with her infradian cycles.
4. Her day is extended so that the change is more in line with her weekend routines.

**Question 31**

A person in Normal Waking Consciousness (NWC) is least likely to

1. have a clear sense of the passage of time.
2. have effective control of cognitive processes.
3. show erratic levels of emotional response.
4. control physical movements with relative ease.

**Question 32**

People sometimes attempt to change their level of consciousness by using psycho-active substances, both legal and illegal.

Which of the following correctly pairs a substance and its effects on a person who takes it?

1. Hallucinogens; increase nervous system activity.
2. Depressants; decrease nervous system activity.
3. Stimulants; decrease nervous system activity.
4. Opiates; increase beta-wave activity.

**Question 33**

Georgie is undergoing an EEG as she is daydreaming.

At this stage, the EEG will probably be showing

1. alpha and delta waves.
2. beta and alpha waves.
3. theta and delta waves.
4. gamma and delta waves.

**Question 34**

EEG, EMG and EOG are all used to establish a person’s level of consciousness. When in a REM sleep, a person would show.

1. low levels of electrical activity on EEG and EOG, high levels on EMG.
2. low levels of electrical activity on all three machines.
3. low levels of electrical activity on EMG, high levels on EOG and EEG.
4. high levels of electrical activity on all three machines.

**Question 35**

There are several theories of why we sleep. Which of the following does **not** provide evidence in support of the ‘Restoration Theory’?

1. Hunting animals sleep for many hours per day; prey animals sleep for few hours in short spells.
2. After intense mental activity during the day, REM sleep episodes will increase on duration and frequency.
3. After sleep deprivation, extended sleep episodes will occur.
4. Athletes will sleep approximately an extra 90 minutes the night they have run a marathon.

**Question 36**

During sleep, we go from wakefulness, through deeper and deeper stages on N-REM sleep and then back up through stages 3 and 2 of N-REM to be in REM sleep.

For a healthy adult, how many of these cycles will occur in one night’s sleep?

1. 2 or 3.
2. 4 or 5.
3. 6 or 7.
4. 8 or 9.

**Question 37**

If deprived of sleep for 24 hours, it is likely that a normal healthy adult will experience

1. hallucinations.
2. memory loss.
3. drooping eyelids.
4. anterograde amnesia.

**Question 38**

The typical adolescent sleep-cycle, when compared to an adult is likely to be characterised by the adolescent

1. going to bed later and sleeping much later.
2. going to bed earlier and awakening at the same time.
3. going to bed at the same time but sleeping later.
4. going to bed earlier and sleeping much later.

**Question 39**

In research involving sleep patterns, participants will typically be asked to keep a ‘sleep diary’, recording their time of going to bed, frequency and duration of awakenings and their perceived quality of sleep and time of final awakening.

The type of data this will produce is

1. qualitative, quantitative, subjective and objective.
2. qualitative, subjective and objective.
3. qualitative, quantitative and subjective.
4. quantitative, subjective and objective.

**Question 40**

“To sleep, perchance to dream”. So said Hamlet, Prince of Denmark! Was he correct?

What are the chances of a normal, healthy adolescent or adult dreaming during a good night’s sleep?

1. Some people dream regularly and some hardly dream at all.
2. We remember our dreams so some nights we dream, others we do not.
3. We dream when we have extended periods of Non-REM sleep.
4. 100%! We may not always remember, but we always dream.

**Question 41**

Which of the following is an accurate statement regarding the sleep pattern of a normal healthy newborn baby?

1. They will sleep for about 13 hours per 24 hour period and have 50% of this as REM sleep.
2. They will sleep for about 16 hours per 24 hour period and have 50% of this as REM sleep.
3. They will sleep for about 13 hours per 24 hour period and have 20% of this as REM sleep.
4. They will sleep for about 16 hours per 24 hour period and have 20% of this as REM sleep.

**Question 42**

Sleep is a necessary process for well-being in humans and animals. It is controlled by the brain. Which structures in the brain are responsible for our sleep-waking cycle?

1. Substantia nigra in the frontal lobe.
2. Suprachiasmatic nucleus in the hypothalamus.
3. Amygdala in the lateral temporal lobe.
4. Medulla in the hindbrain.

**Question 43**

Which of the following would be characterised as a mental disorder?

1. Specific Learning Disorder in Reading - Dyslexia.
2. Autism Spectrum Disorder.
3. Major depression.
4. Dementia.

**Question 44**

Research into Parkinson’s Disease (PD) in Pennsylvania, USA, indicated that over 4 years from 1999-2003, the incidence of PD was as follows:

African Americans: 23 per 100 000 population.

White Americans: 45 per 100 000 population.

These figures would support a hypothesis that:

1. There is no significant difference between African Americans and White Americans in terms of protective factors for PD.
2. African Americans have greater protective factors than White Americans in terms of PD.
3. White Americans have greater protective factors than African Americans in terms of PD.
4. There is a significant difference between African Americans and White Americans in terms of either predisposing or protective factors for PD.

**Question 45**

The biopsychosocial model is preferred for assessment, diagnosis and intervention for Mental Disorders. Which of the following does **not** correctly match the category with the factor?

1. Biological; genetic predisposition.
2. Psychological; long term substance abuse.
3. Social; community expectations.
4. Psychological; rumination.

**Question 46**

The biopsychosocial approach to mental health is considered to be “best practice” because it

1. Is a holistic approach, matching the individual needs with appropriate interventions.
2. Enables the correct medication to be prescribed.
3. Ensures that social support networks are available.
4. Forms the basis of Cognitive Behavioural Therapy (CBT).

**Question 47**

Cognitive Behavioural Therapy (CBT) is a psychotherapeutic technique that is used to treat many mental disorders. It is especially useful in treating the many anxiety and anxiety-related disorders. It works on the basis of

1. challenging dysfunctional beliefs.
2. changing a person’s perception of an object or event.
3. teaching helpful behavioural responses such as meditation and controlled breathing.
4. all of the above strategies are involved in CBT.

**Questions 48 and 49 refer to the information below**

Maria has always been frightened of spiders. Now that her son, James, is a toddler, she makes a great effort to be casual around spiders and will simply put a cup over the spider and ask her husband to put it outside when he has the chance.

**Question 48**

Maria’s strategy is very sensible because otherwise James may also become phobic about spiders through

1. Operant conditioning and observational learning.
2. Operant conditioning and classical conditioning.
3. Observational learning and classical conditioning.
4. Observational learning and reinforcement.

**Question 49**

Maria consults a psychologist to help her deal with her phobia. Which form of treatment is likely to be successful for her?

1. CBT.
2. Medication with SSRIs
3. Systematic desensitisation.
4. Flooding.

**Question 50**

Social support can be crucial in helping people to deal with, or to avoid stress and to maintain good mental health.

It can do this by providing

1. Problem-solving strategies and emotion-focused strategies.
2. Approach and avoidance strategies.
3. Medical interventions.
4. Exercise and diet.

**Section B - Short answer section: answer in the spaces provided.**

**Question 1**

1. Explain what is meant by the term *spinal reflex.* 2 marks

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1. With reference to the *patellar reflex* (knee-jerk reflex) describe how this reflex is shown.

2 marks

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1. What is the evolutionary benefit of a spinal reflex? 1 mark

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**Question 2**

On the diagram of the human Central Nervous System (CNS) below, label the following structures:

Frontal Lobe; Parietal Lobe; Temporal Lobe; Occipital Lobe; Cerebellum; Spinal Cord. 3 marks



**Question 3**

Molecules of neurotransmitters GABA and glutamate each act as ‘*keys’ in the ‘lock-and-key’* mechanism of neural transmission, yet they have opposite effects, with one being the major *excitatory* neurotransmitter and one being the major *inhibitory* neurotransmitter. Explain this apparently contradictory effect by answering the questions below.

The following terms may be useful in your responses, they are provided for information but should be used correctly in your responses:

neurotransmitter molecules key

presynaptic neuron lock

postsynaptic neuron receptor sites

axon terminal synaptic cleft (or gap)

dendritic membrane gate

positively charged ions negatively charged ions

GABA glutamate

1. Which is the major excitatory neurotransmitter?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 1 mark
2. Describe what is meant by the *‘lock-and-key’* mechanism. What is the ‘gate’ that is opened by the key in the lock? 4 marks

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1. How can GABA and glutamate have opposite effects? 2 marks

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**Question 4**

Evie and Kym both been working day shift in a supermarket that is open 24 hours per day. At the end of a three-month roster, the floor manager informs them that in the new roster, Evie will be working the night shift (midnight to 8.00 am) and Kym will be working the evening shift (4.00 pm to midnight).

1. Predict and explain the feelings and performance of both girls during their first week on the new roster. 4 marks

Evie

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**Question 5**

1. On the axes below draw a diagram of Selye’s General Adaptation Syndrome (GAS). Label all stages. 3 marks

**RESISTANCE TO STRESS**

**+++**

**++**

**+**

**NORMAL**

**\_**

**TIME**

**\_ \_**

**\_ \_ \_**

1. If the stressor continues to the final stage, describe the chemical imbalance in the bloodstream. What are some likely outcomes? 2 marks

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**Question 6**

It is possible that an altered state of consciousness (ASC) can be identified from *level of self-control*. Explain this statement and give an example. 2 marks

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**Question 7**

1. Jack has been picked in the senior team for his first game of AFL this weekend. He is experiencing a level of arousal caused by excitement about the opportunity.

Indicate the way in which Lazarus and Folkman’s model may have applied to Jack’s situation:

1 + 1 = 2 marks

1. Primary appraisal.

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1. Secondary appraisal.

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1. Joel, in another AFL side, has also been picked to play his first senior game this weekend. He is experiencing a level of arousal caused by worrying that he may not play well.

Indicate the way in which Lazarus and Folkman’s model may have applied to Joel’s situation:

1 + 1 = 2 marks

1. Primary appraisal.

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1. Secondary appraisal.

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**Question 8**

Tran has been on placement in Warrnambool for 3 weeks as part of his teacher training. During this time, his dog, Buster, has been staying with Tran’s mother, who always warms Buster’s food in the microwave. When Tran takes Buster home, Buster begins to drool and dribble whenever Tran uses his microwave.

Using the language of the three-phase model of classical conditioning:

1. Explain how Buster acquired the ‘drooling’ habit. 3 marks

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1. Explain why Buster drools when Tran uses his own microwave. 1 mark

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1. Describe how Tran might stop Buster’s drooling behaviour. 1 mark

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**Question 9**

What is meant by the ‘three-phase’ model of operant conditioning. Explain with the use of an example.

4 marks

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**Question 10**

After a tragic event when a driver who had taken drugs drove into a pedestrian mall and killed and injured many people, the coroner asked that witnesses should be taken to the scene of the tragedy and then make sworn statements about their memories of the event.

Explain why the coroner took this action, rather than simply asking them to recall the events in court. 3 marks

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**Question 11**

Lydia is teaching her son, Jake aged 5, how to beat egg-whites into a froth to make meringue. She is using a hand-whisk and a large bowl.

Outline the steps in observational learning that Lydia could use to teach Jake. 5 marks

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**Question 12**

Milton has been diagnosed with chronic depression.

1. Complete the table below with at least one appropriate entry in each cell, to show how different factors might be influencing Milton’s mental health. 7 marks

|  |  |  |  |
| --- | --- | --- | --- |
|  | Biological | Psychological | Social |
| Predisposing Risk  Factors |  |  |  |
|  |  |  |  |
| Perpetuating Risk  Factors |  |  |  |
|  |  |  |  |

1. Using information from the table you completed above, explain the concept of *cumulative risk*. 2 marks

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**Question 13**

For her Practical Investigation in VCE Psychology, Lucie is investigating the relationship between caffeine intake and academic performance for Year 11 students.

She devises a scale where caffeine intake is measured as follows:

1 cup tea 1 unit

1 chocolate lolly 2 units

1 cup instant coffee 3 units

1 cup barista-made coffee 5 units

1 can Energy Drink 8 units

She creates a questionnaire that all participants complete and gains permission to access their school exam scores in December.

1. Suggest a possible hypothesis for Lucie’s study. 2 marks

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1. Indicate **two** ethical issues that Lucie must consider and suggest how she might address them for this specific study. 2 marks

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**Question 14**

Your Uncle Joe has been a heavy smoker for many years. Each winter he suffers from respiratory diseases and these appear to be getting worse, though at present Joe denies that this has anything to do with his smoking. Knowing that you are studying VCE Psychology, your Aunt Grace asks you if you can help devise a plan to help Joe to quit smoking.

Outline the stages of the *transtheoretical model* and indicate how you would help Grace to guide her husband on the road to quit smoking. 10 marks

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