

Trial Examination 2017

VCE Psychology Units 3&4

Written Examination

Question and Answer Booklet

Reading time: 15 minutes
Writing time: 2 hours 30 minutes

Student's Name: _____

Teacher's Name: _____

Structure of Booklet

Section	Number of questions	Number of questions to be answered	Number of marks
A	50	50	50
B	17	17	70
			Total 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 correction fluid/tape.

No calculator is allowed in this examination.

Materials supplied

Question and answer booklet of 28 pages.

Answer sheet for multiple-choice questions.

Additional space is available at the end of the booklet if you need extra paper to complete an answer.

Instructions

Write your **name** and your **teacher's name** in the space provided above on this page, and on the answer sheet for multiple-choice questions.

All written responses must be in English.

At the end of the examination

Place the answer sheet for multiple-choice questions inside the front cover of this booklet.

Students are NOT permitted to bring mobile phones and/or any other unauthorised electronic devices into the examination room.

Students are advised that this is a trial examination only and cannot in any way guarantee the content or the format of the 2017 VCE Psychology Units 3&4 Written Examination.

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SECTION A – MULTIPLE-CHOICE QUESTIONS**Instructions for Section A**

Answer **all** questions in pencil on the answer sheet provided for multiple-choice questions.

Choose the response that is **correct** or that **best answers** the question.

A correct answer scores 1, an incorrect answer scores 0.

Marks will **not** be deducted for incorrect answers.

No marks will be given if more than one answer is completed for any question.

Question 1

If Vinnie is under the influence of a depressant, in comparison to a normal waking consciousness his brain wave activity would have _____ in frequency and _____ in amplitude.

- A. decreased; increased
- B. increased; decreased
- C. increased; increased
- D. decreased; decreased

Question 2

Giorgia is feeling excited and energised about her upcoming performance as the lead role in the school play later in the week.

Giorgia is experiencing which of the following types of stress?

- A. acculturative
- B. distress
- C. eustress
- D. a fight-flight-freeze response

Question 3

Whilst performing his job as a paramedic, Guy was violently assaulted by a patient in a drug-induced state. Since then he has experienced post-traumatic stress.

Guy's assault is an example of a _____ factor that has contributed to his disorder.

- A. predisposing
- B. precipitating
- C. perpetuating
- D. protective

Question 4

Which of the following types of memories needs to be reconstructed when it is recalled?

- A. short-term
- B. episodic
- C. procedural
- D. implicit

Use the following information to answer Questions 5–7.

When Emma was a child, she was badly burned in a bushfire resulting in severe pain and trauma. Several years later, Emma has a phobia of fire; whenever she sees an exposed flame, her heart races and her muscles tense up.

Question 5

Emma's burns to her body was a/an

- A. neutral stimulus.
- B. unconditioned stimulus.
- C. unconditioned response.
- D. conditioned stimulus.

Question 6

Classical conditioning in this case has acted as a _____ factor in the acquisition of Emma's phobia of fires.

- A. precipitating
- B. perpetuating
- C. protective
- D. predisposing

Question 7

Emma suffered minor injuries after being involved in terrifying car crash.

Which of the following is a neurohormone that would have played a key role in her memory of the trauma she experiences as a result of the crash?

- A. gamma amino butyric acid (GABA)
- B. acetylcholine
- C. dopamine
- D. adrenaline

Question 8

Cognitive behavioural therapy (CBT) is a treatment most suitable for which of the following sleep disorders?

- A. sleep walking
- B. insomnia
- C. sleep apnoea
- D. circadian phase disorders

Question 9

Claire grabs hold of a prickly weed whilst gardening and then consciously lets go of it as she does not like the feel of the rough texture.

Which division of the nervous system is responsible for the initial detection of the sensory stimuli in this case?

- A. somatic
- B. autonomic
- C. central
- D. brain

Question 10

A disorganised attachment is classified as which of the following types of risk factors for the development of a mental health problem?

- A. biological
- B. psychological
- C. social
- D. cumulative risk

Use the following information to answer Questions 11–13.

Answer the following questions in terms of Hans Seyle's research into the relationship between stress and illness and the development of the General Adaptation Syndrome (GAS).

Question 11

The GAS can best be described as which of the following types of models for dealing with stress?

- A. biological
- B. psychological
- C. social
- D. cognitive

Question 12

Seyle's research was carried out on

- A. humans.
- B. rats.
- C. monkeys.
- D. dogs.

Question 13

One of the stages of the GAS has been described as an 'adaptive stage' in which the parasympathetic nervous system starts to reduce the heart rate and physiological processes, whilst arousal remains at a high level to continue to deal with the stress.

Which of the following stages of the GAS would best fit this description?

- A. shock
- B. countershock
- C. resistance
- D. exhaustion

Question 14

Two Units 3&4 VCE Psychology classes recently completed their test SACs for the first Area of Study. Class A was tested in the school library, whilst class B was tested in room V4 which is the room in which all of their lessons held.

One student from class A complained that class B had an unfair advantage because being tested in room V4 would provide them with more opportunity to use _____ than class A.

- A. elaborative rehearsal
- B. maintenance rehearsal
- C. context dependent cues
- D. state dependent cues

Question 15

What is sleep-onset insomnia a type of?

- A. dyssomnia
- B. parasomnia
- C. circadian phase disorder
- D. all of the above

Use the following information to answer Questions 16–18.

When Emily was in Year 7, she joined the school athletics team as a sprinter. In her first race she did not warm up and suffered a painful calf strain mid-race. After a three week recovery period, the school coach showed her a series of stretching and warm-up exercises. For the remainder of the season Emily would complete the stretching and warm up exercises and she completed the season with no further injuries.

Question 16

In terms of the three-phase model of operant conditioning, which of the following is the antecedent?

- A. her calf strain
- B. completing a race without suffering from an injury
- C. the stretching and warm-up exercises
- D. the period of time just prior to a sprint race

Question 17

Emily's injury from her first race is an example of behaviour (in this case racing without stretching and warming up first) that has been learned by

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

Question 18

Following her injury, Emily has learned the value of stretching and warming up prior to racing as a result of

- A. positive reinforcement.
- B. negative reinforcement.
- C. a conditioned response.
- D. a response cost.

Question 19

A phobia can be characterised by which of the following descriptors?

- A. a temporary condition
- B. rational fear
- C. intense fear
- D. a persistent feeling of unease

Question 20

Which of the following is an example of an external factor that can influence mental health?

- A. personality
- B. stressors
- C. the immune system
- D. genetics

Question 21

In terms of psychological characteristics of consciousness, content tends to be most limited during

- A. a daydream.
- B. sleep.
- C. normal waking consciousness.
- D. an alcohol-induced state.

Question 22

Which of the following best describes REM/NREM sleep cycles?

On average a sleeper experiences one REM/NREM sleep cycle

- A. per night which is an example of a circadian rhythm.
- B. per night which is an example of an ultradian rhythm.
- C. every 90 minutes which is an example of a circadian rhythm.
- D. every 90 minutes which is an example of an ultradian rhythm.

Use the following information to answer Questions 23 and 24.

After a difficult marital break-up, Dan lost custody of his young children and has been unemployed for the last six months. As a result he has been experiencing marked distress. He has become socially withdrawn and is having difficulty sleeping. Initially he was reluctant to accept that he had a mental health problem, but after being encouraged to see a mental health clinician he acknowledges that he needs to change his behaviour.

Answer the following in relation to the transtheoretical model of behavioural change.

Question 23

When Dan is initially reluctant to accept that he has a mental health problem, he is in which of the following stages?

- A. maintenance
- B. contemplation
- C. pre-contemplation
- D. preparation

Question 24

When Dan has acknowledged that he needs to change his behaviour, he has reached which of the following stages?

- A. maintenance
- B. contemplation
- C. pre-contemplation
- D. preparation

Question 25

Which of the following is an affective symptom of sleep deprivation?

- A. moodiness
- B. impaired coordination of movements
- C. difficulty concentrating
- D. impairment in ability to complete lengthy monotonous tasks

Use the following information to answer Questions 26 and 27.

Answer the following in relation to the neural transmission of information across the synapse.

Question 26

Which part of the neuron contains the receptors for the uptake of the neurotransmitters?

- A. axon
- B. axon terminals
- C. dendrites
- D. myelin

Question 27

When GABA binds with a receptor, it will have

- A. an excitatory effect.
- B. an inhibitory effect.
- C. either an excitatory or inhibitory effect.
- D. neither an excitatory or inhibitory effect.

Question 28

Anterograde amnesia has the most significant effect on which of the following?

- A. the duration and capacity of short-term memory
- B. implicit memory
- C. explicit memory
- D. the ability to retrieve well established semantic memories

Question 29

Which of the following is the most sensitive method of retrieval?

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

Use the following information to answer Questions 30 and 31.

Smilla has been employed as a sessional lecturer in media studies at university for the last five years. Recently she has learned that her contract will not be renewed for the following year due to reduced funding. Given the specialised nature of her work, Smilla is concerned that she will have difficulty finding similar work.

Answer the following in relation to the Lazarus and Folkman Transactional Model of Stress and Coping.

Question 30

Which of the following best explains what factors Smilla will consider when making a primary appraisal?

- A. whether she has the resources to cope
- B. the significance of the stressor
- C. who she can turn to for support
- D. how she can reduce her stress levels in the short-term

Question 31

In terms of Smilla's secondary appraisal, this

- A. will need to be made after her primary appraisal has been completed.
- B. can be made at the same time as she is making her primary appraisal.
- C. is when she will evaluate the harm and threats of being unemployed.
- D. will only take place if she has evaluated the stressor as a challenge.

Question 32

Which of the following was the conditioned emotional response in the 'Little Albert' experiment?

- A. the fearful startled response when presented with a white rat
- B. the fearful startled response elicited by the loud banging noise
- C. the presence of the white rat
- D. the loud banging noise

Question 33

Vivien agreed to participate in a sleep study. She spent a night in a sleep laboratory in which her sleep patterns were measured by an electroencephalograph (EEG), an electro-oculograph (EOG), and an electromyograph (EMG).

When Vivien was experiencing REM sleep, _____ would report a lower level of activity in comparison to when she was experiencing NREM sleep.

- A. only the EMG
- B. only the EOG
- C. only the EEG
- D. all three devices

Question 34

The use of benzodiazepines in treating a specific phobia works by _____ of GABA at the _____ neuron.

- A. mimicking the effects; postsynaptic
- B. mimicking the effects; presynaptic
- C. blocking the release; presynaptic
- D. blocking the uptake; postsynaptic

Question 35

Which of the following strategies can be used as a social form of intervention for treating a specific phobia?

- A. psychoeducation
- B. CBT
- C. systematic desensitisation
- D. breathing retraining

Question 36

The use of placebo treatments in experimental research on the effectiveness of medical-based intervention for the treatment of mental health issues would be most effectively tested by the consumption of the placebo drugs by which of the following groups?

- A. all members of a case study
- B. the experimental group in an independent-groups research design
- C. the experimental group in a matched-participants research design
- D. the control condition of a repeated-measures research design

Question 37

Jet lag is mostly likely to cause which of the following?

- A. a disruption to the body's ultradian rhythm
- B. a disruption to the body's circadian rhythm
- C. parasomnia
- D. cataplexy

Question 38

Which of the following provides the best theoretical explanation for the forgetting of declarative memories?

- A. long-term depression
- B. long-term potentiation
- C. synaptogenesis
- D. systematic desensitisation

Use the following information to answer Questions 39–42.

Professor Priddle aimed to investigate the relationship between maintaining an adequate diet and the maintenance of mental health for young adults.

Professor Priddle has submitted a proposal to a university ethics committee to recruit undergraduate students from a local university to participate in the study that are aged between 18 and 30.

Question 39

Which of the following is a characteristic of an experiment?

- A. an in-depth study of a group of people
- B. the collection of data over a period of time
- C. the analysis of data
- D. the use of an independent variable (IV) and a dependent variable (DV)

Question 40

Which of the following sampling techniques is Professor Priddle using in this case?

- A. random
- B. random-stratified
- C. convenience
- D. stratified

Question 41

Maintaining an adequate diet is a _____ factor for maintaining mental health.

- A. predisposing
- B. precipitating
- C. perpetuating
- D. protective

Question 42

The major purpose of an ethics committee for psychological research is to ensure that

- A. experiments are correctly reported.
- B. the experiment is profitable.
- C. the welfare of participants is prioritised.
- D. the researchers are reputable.

Question 43

Regular exercise

- A. uses up stress hormones which will increase the level of stress an individual feels.
- B. uses up stress hormones which will reduce the level of stress an individual feels.
- C. releases additional stress hormones which will increase the level of stress an individual feels.
- D. releases additional stress hormones which will reduce the level of stress an individual feels.

Question 44

Elaborative rehearsal is used to improve the

- A. effectiveness of sensory memory.
- B. duration of short-term memory.
- C. capacity of short-term memory.
- D. durability of a memory trace in long-term memory.

Question 45

Adults typically spend the largest amount of their sleep in which of the following stages?

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

Question 46

According to social learning theory, the

- A. learner needs to be directly reinforced or punished.
- B. learning might not appear immediately (after it has been learned).
- C. learning principles are distinctly different from operant conditioning.
- D. learning requires the repeated association of two previously unrelated stimuli.

Question 47

In terms of social learning theory, reinforcement cannot influence the learning of an individual when it occurs

- A. vicariously.
- B. from the model.
- C. from a third party.
- D. reflexively.

Question 48

Sleep walking episodes are most likely to occur during

- A. a hypnagogic state.
- B. Stages 1 and 2 of NREM sleep.
- C. Stages 3 and 4 of NREM sleep.
- D. REM sleep.

Question 49

Which of the following statements best describes the relationship between genetics and the incidence of mental illness?

- A. There is no relationship between genetics and the incidence of mental illness.
- B. Genetics can be a predisposing factor to the development of a mental illness.
- C. Genetics is the cause of all mental illness.
- D. Genetics does not contribute to mental illness, but it can result in a poor response to medication due to abnormal levels of neurotransmitters in the brain.

Question 50

Which of the following divisions of the nervous system is responsible for the unconscious response to the pupil of the eye dilating or constricting in response to changing lighting conditions?

- A. somatic nervous system
- B. autonomic nervous system
- C. central nervous system
- D. spinal cord

END OF SECTION A

SECTION B**Instructions for Section B**

Answer **all** questions in the spaces provided. Write using blue or black pen.

Question 1 (6 marks)

Ruth, despite the challenges of Year 12 and a recent period of sickness, is demonstrating the characteristics of a mentally healthy person.

- a.** Identify and describe **two** characteristics of Ruth's behaviour that would indicate that she is mentally healthy. 2 marks

- b.** Describe the importance of resilience in Ruth's ability to maintain mental health. 2 marks

- c.** Identify **two** social factors that would help Ruth maintain mental health during Year 12. 2 marks

Question 2 (2 marks)

Describe a strength and a limitation of using subjective reporting to measure states of consciousness.

Question 3 (7 marks)

Dr Park wanted to test the effectiveness of a natural remedy he titled 'Lgaba' to slow down the rate of motor decline for victims of Parkinson's disease. To test his theory he advertised through a variety of social media channels for volunteers between the ages of 60 and 85 who had been diagnosed with Parkinson's disease. He prescreened all the respondents to determine if they were suitable to participate in the 12-month research.

124 patients were selected to participate in the research which used a repeated-measures research design.

All participants completed a variety of pretests to evaluate the severity of their motor symptoms, the results were combined to generate a score out of 100 for each patient, with 100 indicating the most severe decline in motor functioning as a result of their condition.

All participants unknowingly took a daily placebo for the first six months of the research and then took a daily dose of the Lgaba drug for the remaining six months.

At the end of the first six months of the experiment, all participants were given the same series of tests as the pretests and then again at the conclusion of the study in order to evaluate the effectiveness of the Lgaba drug. The results were summarised as follows.

	Average pretest score out of 100	Average score after six months of placebos out of 100	Average score after another six months of Lgaba out of 100
Performance of 124 participants on a series of motor tests	55.2	61.1	61.3

- a. Describe the role of dopamine in Parkinson's disease. 2 marks

- b. Write a research hypothesis for this experiment. 3 marks

- c. Operationalise the dependent variable (DV) and independent variable (IV). 2 marks

Question 4 (2 marks)

Using an example, describe how a neurotransmitter can produce an 'excitatory' effect.

Question 5 (4 marks)

After witnessing a hit-and-run accident, an eyewitness was interviewed by the police.

- a.** Why would the eyewitness have to reconstruct their memory of the accident? 2 marks

- b.** How could a leading question affect the reliability of the eyewitness's memory? 2 marks

Question 6 (5 marks)

Millie is a Psychology student who has decided to repeat Ivan Pavlov's classical conditioning experiment by conditioning a dog to salivate to the sound of a bell by repeatedly pairing the bell with food, which Millie achieved after seven pairings.

- a.** Using the language of classical conditioning, describe how stimulus generalisation would occur.

2 marks

- b.** Using the language of classical conditioning, describe how Millie could extinguish the classically conditioned behaviour.

3 marks

Question 7 (4 marks)

Identify and distinguish between the functions of the two divisions of the peripheral nervous system in responding to sensory stimuli.

Question 8 (4 marks)

Val works part-time for emergency services and stayed up all night as a result of a weather emergency, then went straight to her afternoon shift as a cashier at a supermarket. Vin slept last night, but went to a breakfast fundraiser and has reported to his job at a supermarket in an alcohol-induced state.

- a.** Describe the effects on Vin's level of awareness as a result of being in an alcohol-induced state. 2 marks

- b.** Describe **one** similarity and **one** difference in consciousness between Val and Vin as a result of their sleep-deprived and alcohol-induced states respectively. 2 marks

Question 9 (2 marks)

Describe the impact of rumination on mental health.

Question 10 (7 marks)

After being attacked by a large dog as a child, Rishi has developed a phobia of large dogs. Now whenever Rishi sees a large dog, he tenses up and his heart starts racing in anticipation of being attacked.

- a.** Describe the role of the stress response in Rishi's response to seeing a dog. 2 marks

- b.** Describe how long-term potentiation has contributed to Rishi's phobia. 2 marks

- c.** Describe how cognitive behavioural therapy (CBT) could be used to treat Rishi's phobia. 3 marks

Question 11 (2 marks)

Sally's husband recently left her and she is now feeling stressed as a result of the pressures of being a single parent with two young children.

Describe how Sally could use approach strategies for dealing with her stress.

Question 12 (2 marks)

Describe the role of the following brain structures in relation to memory.

- a.** hippocampus 1 mark

- b.** cerebellum 1 mark

Question 13 (3 marks)

Answer the following questions in terms of the evolutionary theory of sleep.

- a.** Describe the purpose of sleep. 1 mark

- b.** Identify **one** piece of evidence for the theory. 1 mark

- c.** Identify **one** limitation of the theory. 1 mark

Question 14 (4 marks)

Josh's hand comes into contact with a hot coffee cup.

Distinguish between an unconscious and a conscious response to the heat of a coffee in terms of the nervous system.

Question 15 (4 marks)

Complete the following table, which distinguishes between the capacity and duration of the memory stores of the Atkinson-Shiffrin multi-store model of memory.

	Sensory memory	Short-term memory	Long-term memory
Capacity	unlimited		
Duration			unlimited

Question 16 (2 marks)

Provide **two** distinctions between the sleep patterns of a newborn infant versus a ten-year-old child.

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[illegible]

