



Trial Examination 2015

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

<i>Section</i>	<i>Number of questions</i>	<i>Number of questions to be answered</i>	<i>Number of marks</i>
A	65	65	65
B	21	21	60
C	4	4	15
			Total 140

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.

Materials supplied

Question and answer booklet of 30 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 2015 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

Which of the following schedules of reinforcement is the **least** resistant to extinction?

- A. continuous
- B. fixed-ratio
- C. fixed-interval
- D. variable-interval

Question 2

_____ memories are retrieved without conscious awareness.

- A. Semantic
- B. Episodic
- C. Implicit
- D. Explicit

Question 3

Dom crosses the street by walking between two parked cars. She is distracted by her iPhone when an approaching car beeps its horn, and she rapidly responds by stepping backwards towards safety.

Dom's ability to avoid being hit by the car is most likely due to

- A. the release of cortisol.
- B. her sympathetic nervous system.
- C. her allostatic load.
- D. the activation of her HPA axis.

Question 4

At 1.00 am, Sophie thinks she hears an intruder in her house. She forcibly wakes up her father, who initially experiences sleep inertia and is not very responsive to Sophie's distress.

Sophie's father was most likely in which of the following stages of sleep?

- A. REM sleep
- B. a hypnagogic sleep
- C. stage 2 of NREM sleep
- D. stage 4 of NREM sleep

Use the following information to answer Questions 5–8.

Five-year-old Zahara is halfway through her first year of primary school. Her teacher is endeavouring to develop her language skills via the use of a token economy system.

Question 5

Token economies use the principles of

- A. vicarious conditioning.
- B. operant conditioning.
- C. classical conditioning.
- D. graduated exposure.

Question 6

Zahara is learning language skills during a _____ period, which is an example of experience-_____ learning.

- A. critical; dependent
- B. critical; expectant
- C. sensitive; dependent
- D. sensitive; expectant

Question 7

From which neural structure are additional neurotransmitters sent when Zahara is memorising new words?

- A. dendrites
- B. axon terminals
- C. the synapse
- D. the myelin sheath

Question 8

The best way for Zahara to encode the meaning of new words is through

- A. structural processing.
- B. acoustic processing.
- C. semantic processing.
- D. maintenance rehearsal.

Question 9

Eustress

- A. tends to be a long-term response.
- B. triggers activity from the parasympathetic nervous system.
- C. is a reflexive response to a stressor.
- D. tends to have a similar effect on the body as distress.

Question 10

A mental illness diagnosis

- A. tends to be short-term.
- B. is permanent for all patients diagnosed.
- C. can be made by using more than one classification system.
- D. can only be made for adults over the age of 18.

Use the following information to answer Questions 11–15.

Professor Plum is conducting research into the sleeping patterns of first-year university students. She predicts that students who maintain regular sleep times will have lower levels of stress than students who maintain more irregular sleep patterns during a two-week period. 85 students (60% female, 40% male) from Banksia University responded to an advertisement posted on a number of pillars around the Student Union building. Each student is required to complete a self-report for the last two weeks of the semester. The university ethics committee has ruled out deliberate sleep deprivation of students enforced by the researchers.

Question 11

Which research design would most effectively reduce participant-related variables, given the constraints made by the ethics committee?

- A. matched participants
- B. repeated measures
- C. independent groups
- D. stratified independent groups

Question 12

Which sampling method is Professor Plum using?

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

Question 13

The dependent variable in this case would be

- A. the average amount of sleep per night.
- B. stress levels.
- C. the reduction in stress levels.
- D. the regularity of sleep patterns.

Question 14

According to the restorative theory of sleep, a lack of NREM sleep would be reflected by responses to the self-report indicating

- A. poor memory recall.
- B. excessive fatigue.
- C. difficulties concentrating in class.
- D. excessive irritability during the day.

Question 15

The results indicated that participants who stayed out late on weekends and slept in the following morning had difficulty going to sleep on weeknights.

This could be best explained by

- A. a delay in the release of cortisol.
- B. excessive release of cortisol in the evening.
- C. excessive release of melatonin in the evening.
- D. a delay in the release of melatonin.

Use the following information to answer Questions 16–20.

Electroconvulsive therapy (ECT) has been used to treat depression by stimulating neural activity in the frontal lobe. One of the side effects is that patients are disoriented after a brief period of unconsciousness, and they often have difficulty remembering the events leading into the treatment.

Question 16

The loss of memory of events leading into the surgery is a form of

- A. anterograde amnesia.
- B. retrograde amnesia.
- C. proactive interference.
- D. retroactive interference.

Question 17

The failure to recall events leading up to the treatment can be best explained by

- A. decay theory.
- B. retrieval failure.
- C. interference.
- D. a failure to consolidate.

Question 18

The failure to recall events leading up to the treatment is most likely attributable to a disruption to the

- A. amygdala.
- B. hippocampus.
- C. ventral tegmental area.
- D. corpus callosum.

Question 19

Patients treated for a mental condition are least likely to be labelled with a particular mental illness if it is classified by using

- A. the ICD-10.
- B. the DSM-5.
- C. a dimensional approach.
- D. a categorical approach.

Question 20

An ethics committee might reject research into the effectiveness of ECT for the treatment of depression because the potential for harmful side effects outweighs the potential benefits.

This describes the ethical principle of

- A. voluntary participation.
- B. beneficence.
- C. deception.
- D. informed consent.

Question 21

Which of the following is an inferential statistic?

- A. p -value
- B. mode
- C. median
- D. average

Question 22

A week after her final exam, Grace is feeling very relaxed.

Whilst she is lying comfortably on the beach, her brainwave pattern would predominately indicate which type of brainwave?

- A. alpha
- B. beta
- C. theta
- D. delta

Question 23

An alcohol-induced state is an altered state of consciousness.

This is because alcohol

- A. is a stimulant that accelerates nervous system activity.
- B. suppresses the release of melatonin.
- C. releases additional cortisol into the bloodstream.
- D. acts as a depressant, thus slowing nervous system activity.

Question 24

When sleeping, adults generally spend the most time in

- A. REM.
- B. NREM stages 1 and 2.
- C. slow-wave sleep.
- D. deep sleep.

Question 25

A newborn typically spends the most amount of their sleeping time in

- A. REM.
- B. NREM stage 1.
- C. NREM stage 2.
- D. NREM stage 4.

Question 26

Sprouting is a feature of adaptive plasticity which refers to

- A. dendrites of the postsynaptic neuron.
- B. dendrites of the presynaptic neuron.
- C. axon terminals of the postsynaptic neuron.
- D. the release of additional neurotransmitters from the presynaptic neurons.

Use the following information to answer Questions 27–31.

Zachary was fishing on a pier in the middle of winter when he lost his balance and suddenly fell into the water. Initially he had difficulty keeping his head above water and was fearful of sharks, given there had been recent sightings from the pier. He rapidly removed some of his heavy clothing after recalling a similar experience he had witnessed, where a friend fell from a pier and removed several items of clothing, before attempting to swim to safety. Once Zachary felt that he could swim, he rapidly swam about 50 metres to the beach.

Question 27

Which brain structure was first to respond to the threat of drowning/shark attacks?

- A. amygdala
- B. hippocampus
- C. pituitary gland
- D. adrenal gland

Question 28

Which stress hormone would have been released almost simultaneously upon entry to the water?

- A. cortisol
- B. dopamine
- C. adrenaline
- D. serotonin

Question 29

When Zachary arrived safely at the shore, he was feeling relieved, but short of breath and drained.

This was due to

- A. reaching allostatic load.
- B. reaching allostatic overload.
- C. the effects of the fight-flight response.
- D. distress.

Question 30

Zachary's parasympathetic nervous system would have been first activated

- A. when he realised he was going to fall in the water.
- B. just after he fell in the water.
- C. as he was swimming to safety.
- D. once he reached shore and felt safe.

Question 31

Zachary's response of removing heavy clothing before attempting to swim had been learned through

- A. classical conditioning.
- B. trial-and-error learning.
- C. operant conditioning.
- D. social learning.

Question 32

The semantic network theory applies to material that is stored in the

- A. sensory memory.
- B. short-term memory.
- C. long-term memory.
- D. working memory.

Question 33

According to the decay theory, what is the most effective means of preventing the decay of memories over time?

- A. chunking material
- B. regularly revisiting the information over time
- C. using a form of deep processing to encode the information
- D. storing the information in a semantic network

Question 34

Which type of long-term memory is the most resistant to decay in an ageing individual?

- A. working memory
- B. semantic memory
- C. procedural memory
- D. episodic memory

Question 35

According to the Baddeley and Hitch model of working memory, the episodic buffer is responsible for

- A. suppressing irrelevant information.
- B. storing verbal information.
- C. using mental imagery.
- D. integrating information from the slave systems and long-term memory.

Question 36

In an experiment that tested the delayed recall of a series of fifteen words that were verbally read out, the recency effect was not present.

This could be best explained by

- A. the limitations of sensory memory.
- B. the limitations of short-term memory.
- C. the limitations of long-term memory.
- D. proactive interference.

Use the following information to answer Questions 37–39.

Professor Valk conducted research into the effects of sleep deprivation on taxi drivers who regularly worked long night shifts. Volunteers spent two nights in a sleep laboratory: one during the night following at least three consecutive nights in which the drivers were sleep-deprived, and one during a one-week period in which the drivers had no night shifts.

Question 37

Professor Valk compared the drivers' sensitivity to pain when they were and were not sleep-deprived.

It would be expected that during their sleep-deprived state they would experience

- A. perceptual distortions in terms of a higher sensitivity to pain.
- B. perceptual distortions in terms of a reduced sensitivity to pain.
- C. cognitive distortions in terms of a higher sensitivity to pain.
- D. cognitive distortions in terms of a reduced sensitivity to pain.

Question 38

When the taxi drivers were completing the lengthy night shifts, they were prone to experiencing microsleeps.

These were brief periods where the drivers had a loss of awareness characterised by brain-wave patterns that resembled

- A. REM sleep.
- B. a light NREM sleep.
- C. a deep sleep.
- D. normal waking consciousness.

Question 39

Drivers that were sleep-deprived encountered difficulties maintaining attention during periods in which they were stationary.

Attention is largely controlled by which lobe of the cerebral cortex?

- A. frontal
- B. parietal
- C. occipital
- D. temporal

Question 40

The primary cortex in each lobe of the cerebral cortex has a sensory function, except for the _____ lobe.

- A. frontal
- B. parietal
- C. occipital
- D. temporal

Use the following information to answer Questions 41–44.

Whilst mowing the lawn, 12-year-old Jan inadvertently got her foot stuck in a pothole. As she lost her balance, the lawnmower ran over her foot, severing two of her toes in the process. Jan experienced excruciating pain as a result of her injury and, for several months afterwards, the mere sound of a lawnmower caused her to tense up and her heart to start racing. Her mother offered to buy Jan a new bicycle if she could overcome her fear of lawnmowers and once again mow the lawn.

Question 41

The sound of a lawnmower prior to the accident was the

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

Question 42

The excruciating pain Jan experienced as a result of the accident was the

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

Question 43

Jan's mother's suggestion of buying her a new bicycle to mow the lawn is a form of _____ conditioning.

- A. classical
- B. operant
- C. vicarious
- D. instrumental

Question 44

Which form of classical conditioning would be the least appropriate in enabling Jan to once again mow the lawn without fear?

- A. graduated exposure
- B. flooding
- C. aversion therapy
- D. shaping

Question 45

Thorndike's law of effect is associated with which of the following learning theories?

- A. classical conditioning
- B. trial-and-error learning
- C. operant conditioning
- D. observational learning

Question 46

Using chunking to memorise a ten-digit mobile phone number is an effective means of increasing the

- A. duration of long-term memory.
- B. capacity of long-term memory.
- C. duration of short-term memory.
- D. capacity of short-term memory.

Use the following information to answer Questions 47–49.

Three weeks ago, Trisha bought a new car. She drove the car to Queensland with her family, planning two overnight stays along the way. On the first night she arrived at the first hotel. As Trisha was filling in a registration form, she came across a question asking for her car registration details. She could easily remember that the number plate on her old car was 'SXU 527'. She looked out the reception window and read the number plate and subvocalised 'TIS 414' a couple of times before writing down these details. After checking out of the hotel the next day and driving several hundred kilometres, she arrived at her next overnight stay, and once again, when completing the registration form, she could not remember the car number plate. Her daughter, who was with her, prompted her by saying, "I think it starts with TI". Once Trisha heard this, she was able to remember the entire number plate.

Question 47

On the second overnight stay, Trisha's inability to remember the new number plate was most likely a result of

- A. retrieval failure.
- B. decay theory.
- C. interference.
- D. suppression.

Question 48

On the first overnight stay, Trisha's inability to remember the new number plate was most likely a result of

- A. anterograde amnesia.
- B. retrograde amnesia.
- C. retroactive interference.
- D. proactive interference.

Question 49

Trisha's difficulty in remembering the number plate when filling in the registration form can be best explained by _____ having a _____ level of sensitivity of retention.

- A. recall; low
- B. recall; high
- C. recognition; low
- D. recognition; high

Question 50

In order to teach her sons to clear the table after dinner, Elisha employs a token economy. Every time they clear the table without being asked, they receive a token. Once they have accumulated ten tokens, they receive a predetermined reward.

In this case, Elisha has used

- A. a partial schedule of reinforcement only.
- B. a continuous schedule of reinforcement only.
- C. both a partial and continuous schedule of reinforcement.
- D. neither a partial nor continuous schedule of reinforcement.

Question 51

The ICD-10, unlike the DSM-5,

- A. can potentially lead to the stigmatising of patients as a result of being labelled with a mental condition.
- B. provides a detailed background of mental conditions.
- C. grades the severity of symptoms identified by a mental health clinician.
- D. covers both physiological and psychological illness.

Question 52

Biofeedback aims to help a patient gain control of physiological responses triggered by stress.

These responses are controlled by the patient's _____ nervous system.

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

Question 53

The left cerebral hemisphere specialises in

- A. visualising an object on a map.
- B. the ability to recognise students from a class photo.
- C. the ability to evaluate cost savings on a Boxing Day sale at a large store.
- D. daydreaming.

Question 54

Which of the following is a sensation that would be processed predominately in the left side of the cerebral cortex?

- A. visual information in the left visual field
- B. movements from the left side of the body
- C. pain detected on the left side of the body
- D. verbal information from the left side of the body

Question 55

As she entered the school gates, Maddie received a detention from Mr Harrington for wearing a nose ring. Maddie continues to wear the nose ring to school, but whenever she sees Mr Harrington in the distance, she removes it to avoid a further detention.

Maddie's behaviour demonstrates stimulus

- A. discrimination which has been classically conditioned.
- B. generalisation which has been classically conditioned.
- C. discrimination which has been operantly conditioned.
- D. generalisation which has been operantly conditioned.

Use the following information to answer Questions 56–58.

An experiment was conducted on hemispheric specialisation using university undergraduate volunteers with intact brains.

A tachistoscope briefly flashed words or images to either or both the left and right visual fields, and participants were timed on how long it took them to name what they saw.

Question 56

Pictures flashed to the left visual field would be initially processed by the

- A. primary cortex in the right occipital lobe.
- B. association areas in the right occipital lobe.
- C. primary cortex in the right frontal lobe.
- D. association areas in the right frontal lobe.

Question 57

When words were flashed to both the left and right visual fields, it would be expected that the participant

- A. would become confused and could not name either word.
- B. could only name words flashed to the left visual field.
- C. could only name words flashed to the right visual field.
- D. could name the words flashed to both visual fields.

Question 58

Which division of the nervous system is responsible for conveying the visual information from the eye to the brain?

- A. sympathetic
- B. parasympathetic
- C. somatic
- D. visceral

Question 59

Don has difficulty completing some of the positions demonstrated by his instructor in his weekly Pilates class. He has poor balance and a lack of flexibility.

This relates to which of the following stages of Bandura's observational learning?

- A. attention
- B. retention
- C. reproduction
- D. motivation

Question 60

By modern-day ethical standards, Watson and Rayner's 'Little Albert' experiment would need to have been terminated when Albert was experiencing distress, in order to avoid breaching the _____ ethical principle.

- A. debriefing
- B. no-harm
- C. informed-consent
- D. deception

Question 61

A football player that is banned from playing for three weeks for 'dangerous contact towards the head' has been conditioned via

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

Use the following information to answer questions 62–65.

A group of Year 7 students have been studying all the Australian prime ministers since Federation in their Australian History class. The teacher has advised the class that they will have a quiz on the prime ministers in tomorrow's class.

Question 62

Which of the following types of recall would students be expected to have the most difficulty with in their quiz?

- A. cued recall
- B. free recall
- C. serial recall
- D. relearning recall

Question 63

Which division of Baddeley and Hitch's working memory is responsible for controlling the students' attention when studying key aspects of the prime ministers as they read through their notes?

- A. visuo-spatial sketchpad
- B. phonological loop
- C. episodic buffer
- D. central executive

Question 64

Which lobe of the cerebral cortex is largely responsible for the students' attention when sitting the test?

- A. frontal
- B. parietal
- C. occipital
- D. temporal

Question 65

When marking the multiple-choice section of the test, the teacher would be best advised to use a _____ schedule of reinforcement in order to best rank the students.

- A. fixed-ratio
- B. variable-ratio
- C. continuous
- D. variable-interval

END OF SECTION A

SECTION B: SHORT ANSWER QUESTIONS

Instructions for Section B

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

Question 1 (3 marks)

Sathya is a Year 7 student who was recently on a school excursion to the city with her English class. The assessment for this will require her to write about five aspects of the excursion that were the most memorable in next week’s double period.

Explain how Sathya could use narrative chaining to help her remember the following five key items for her essay: train, river, skyscrapers, crowds, noise.

Question 2 (2 marks)

At the start of his double Psychology lesson, Brent was productively completing an Empirical Research Activity (ERA). This continued until the middle of the double period, at which time he began daydreaming. Describe the changes in content limitations for Brent.

Question 3 (5 marks)

Evangeline has a repressed memory of a childhood fishing trip. She now has an intense fear of open waterways, for example, lakes or the ocean.

- a. In Evangeline’s case, what is meant by a repressed memory? 2 marks

- b. Using the language of classical conditioning, explain how graduated exposure could be used to help Evangeline overcome her fear of open water. 3 marks

Question 4 (4 marks)

After experiencing a stroke whilst on an overseas trip, Vern’s medical report revealed he is suffering from aphasia. After arriving back in Australia, his doctor needs to determine what type of aphasia he has.

Describe **two** ways his doctor could determine if Vern has either or both types of aphasia.

Question 5 (2 marks)

Andrew has gone on a one-week boat cruise to visit his European relatives with his two-year-old son, Xander.

Identify **two** differences in the expected sleep patterns of Andrew and Xander.

Question 6 (6 marks)

Neale is distressed due to his spouse suddenly leaving him. As a result, he has had difficulty sleeping and feels pressure from work due to his failure to meet key deadlines. After several weeks he is feeling run down and is suffering from chronic migraines.

- a.** Describe how Neale has reached a state of allostatic overload. 3 marks

- b.** In terms of the Lazarus and Folkman Transactional Model of Stress and Coping, describe a possible primary appraisal that Neale may have made. 2 marks

- c.** In terms of the Lazarus and Folkman Transactional Model of Stress and Coping, identify a possible emotion-based coping strategy that Neale may have adopted. 1 mark

Question 7 (3 marks)

Kim grabs an old wooden fence paling, which causes a splinter to painfully enter his finger. He then goes to the bathroom and gets a pair of tweezers to carefully remove the splinter. This alleviates the pain almost immediately.

Identify and describe the functions of **three** types of neurons Kim has used in this case.

Question 8 (4 marks)

Every Saturday, Alison takes her daughter Imogen food shopping. Imogen saw an ice-cream shop and began nagging constantly for an ice cream. Alison repeatedly explained that they were in a hurry and there was no time. Imogen's nagging persisted until Alison eventually bought her an ice cream. Imogen was then well-behaved for the rest of the shopping trip.

Explain how both positive and negative reinforcement have been applied in this case.

Question 9 (2 marks)

With the use of examples, distinguish a reflex from a behaviour learnt through maturation.

Question 10 (2 marks)

Describe how the release of cortisol can be both helpful and harmful to an individual.

Question 11 (3 marks)

Describe how each component of the biopsychosocial approach can be used to help an individual deal with chronic stress.

Question 12 (3 marks)

Spatial neglect is a rare condition.

a. What causes spatial neglect? 1 mark

b. Describe a testing procedure that could indicate if a patient is suffering from spatial neglect. 2 marks

Question 13 (2 marks)

Explain why split-brain patients do not tend to have any noticeable effects when processing visual information in their everyday lives.

Question 14 (4 marks)

With the use of examples, distinguish between classical and operant conditioning in terms of the nature of the response and role of the learner.

Question 15 (2 marks)

Describe how a student's rate of forgetting will change over time after taking twenty minutes to learn a series of twenty nonsense syllables for a memory experiment in a VCE Psychology class.

Question 16 (2 marks)

Whilst riding home from school on his bike, Don had a bad accident, resulting in intense pain in his hands, knees and head. This triggered memories of pain he felt two years earlier as a result of a skateboarding accident.

Describe how state-dependent cues have triggered memories of the pain Don felt at the time of the skateboarding accident.

Question 17 (2 marks)

How does observational learning differ from operant conditioning?

Question 18 (3 marks)

Dr Valk conducted a case study on newborns' sleeping behaviour using video monitoring.

- a.** What is meant by the term 'case study'? 1 mark

- b.** How does video monitoring gather data? 1 mark

- c.** What is a limitation of the use of case studies in research? 1 mark

Question 19 (2 marks)

Explain how Wally, whilst preparing for a memory-revision test, could create a four-letter acrostic poem to help him remember the four components of working memory: visuo-spatial sketchpad, phonological loop, episodic buffer and central executive.

Question 20 (2 marks)

Uncle Greg is experiencing the early stages of Alzheimer’s disease.

Provide a biological explanation for the cause of this neurodegenerative disease.

Question 21 (2 marks)

Whilst walking to her car at Chadstone shopping centre, Evie bumps into an old school friend. Her friend asks Evie to call her and states her phone number. Evie does not have a pen so she subvocalises the number several times as she is walking back to the car, and then when she gets there, she writes it down. Within seconds of writing it down she has already forgotten it.

Explain how this can occur in terms of rehearsal.

END OF SECTION B

SECTION C: RESEARCH SCENARIO

Instructions for Section C

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

- Professor Delillio has provided some brief notes on a recently conducted experiment that investigated the effectiveness of the use of meditation in reducing the stress levels of VCE students.
- He used a convenience sample of 40 students (24 male and 16 female) from Deepdene Secondary College, and a matched-participants design.
- Half of the participants were required to complete 3×30 -minute meditation sessions for four weeks and the other half were instructed to avoid any form of meditation during this period.
- Professor Delillio determined that the level of significance required for the p -value was less than 0.05.
- A stress-inventory test was used to measure stress levels before and after the commencement of the meditation program.
- A statistical test was conducted to determine the significance of the results, based on the difference between the scores on the stress-inventory tests for the meditation versus non-meditation groups. The result was found to be $p = 0.007$.
- According to the experimental notes, there were standardised instructions and procedures, but there was also a potential placebo effect.

Question 1 (2 marks)

Write a research hypothesis for the experiment described above.

Question 2 (2 marks)

What is the purpose of the non-meditation group of participants in this experiment?

Question 3 (1 mark)

What is an advantage of convenience sampling?
