



Trial Examination 2018

VCE Psychology Units 1&2

Written Examination

Question and Answer Booklet

Reading time: 15 minutes

Writing: 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 | 50 | 50 | 50 |
| B | 19 | 19 | 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 24 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.

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

The ancient Egyptians believed the human mind and soul, together with their associated thoughts, feelings and emotions, were held within the

- A. brain.
- B. stomach.
- C. liver.
- D. heart.

Question 2

Some individuals with severe epilepsy underwent a procedure known as split-brain surgery.

This procedure involved cutting the

- A. cerebellum.
- B. cerebrum.
- C. cerebral cortex.
- D. corpus callosum.

Question 3

Computed tomography (CT) scans use

- A. X-rays to create black and white cross-sectional images of the brain.
- B. X-rays to create coloured cross-sectional images of the brain.
- C. magnetic fields to create black and white cross-sectional images of the brain.
- D. magnetic fields to create coloured cross-sectional images of the brain.

Question 4

Functional magnetic resonance imaging (fMRI) scans and positron emission tomography (PET) scans are neuroimaging techniques.

The advantage of using fMRI scans over PET scans is that fMRI scans

- A. produce coloured images, whereas PET scans do not.
- B. are enhanced by the use of coloured markers in the blood.
- C. do not use radioactive markers.
- D. are slightly slower and thus more accurate.

Question 5

Which one of the following sequences best illustrates the order of actions in the nervous system?

- A. receive information → respond to information → process information
- B. receive information → organise information → process information
- C. respond to information → process information → organise information
- D. receive information → process information → respond to information

Question 6

Charlize gave a speech on stage at the school assembly. Her heart was beating rapidly and her breathing rate was faster than normal. When Charlize returned to her seat, her heart rate and breathing rate slowed down again.

The branch of the nervous system that was responsible for the changes to Charlize's heart rate and breathing rate after she returned to her seat was the

- A. autonomic nervous system.
- B. somatic nervous system.
- C. parasympathetic nervous system.
- D. sympathetic nervous system.

Question 7

The main function of dendrites is to

- A. send neural impulses down the length of the neuron.
- B. instigate the electrical neural impulse within the neuron.
- C. receive information from other neurons.
- D. transmit information to other neurons.

Question 8

Interneurons are located within the

- A. peripheral nervous system.
- B. autonomic nervous system.
- C. sympathetic nervous system.
- D. central nervous system.

Question 9

What function do Schwann cells perform?

- A. They protect the neuron from infection.
- B. They produce and maintain the myelin sheath around the axons.
- C. They provide nutrition to the neuron.
- D. They provide structural support to the neuron.

Question 10

The reticular formation has a vital role to play in

- A. arousal and consciousness.
- B. memory.
- C. sleep and dreaming.
- D. breathing and respiration.

Question 11

The medulla is important in

- A. maintaining arousal and consciousness.
- B. controlling vital body functions such as breathing.
- C. stimulating the onset of sleep.
- D. performing complex cognitive functions.

Question 12

Specialties of the right hemisphere include

- A. creativity, speech production and appreciation of art.
- B. spatial thinking, appreciation of music and daydreaming.
- C. creativity, speech comprehension and reading.
- D. writing, spirituality and visualising places.

Question 13

Jane stroked the velvet material of a cushion with her right hand.

Which part of her brain was responsible for detecting the feel of the velvet?

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

Question 14

Clara has suffered a stroke and has experienced difficulties in the production of her speech.

What is the likely area and lobe the stroke occurred in?

| | Area | Lobe |
|----|-------------|-------------|
| A. | Wernicke's | temporal |
| B. | Broca's | parietal |
| C. | Wernicke's | occipital |
| D. | Broca's | frontal |

Question 15

If Peter was consistently shaving only the right side of his face and was unaware that the left side was unshaved, which of the following lobes may be damaged?

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

Question 16

Which one of the following sequences best illustrates the order of the progressive development of myelination in the brain?

- A. hindbrain → midbrain → sensory cortex → motor cortex
- B. midbrain → sensory cortex → motor cortex → hindbrain
- C. motor cortex → sensory cortex → midbrain → hindbrain
- D. sensory cortex → motor cortex → midbrain → hindbrain

Question 17

Synaptic pruning

- A. is the elimination of overused synapses.
- B. occurs predominantly in the frontal lobe.
- C. is a process that occurs over a period of many years.
- D. occurs after synaptogenesis has been completed.

Question 18

In 1848 a metal rod shot upwards through the skull of Phineas Gage and caused damage to his prefrontal cortex.

What biological and psychological changes are consistent with this type of brain damage?

| | Biological change | Psychological change |
|----|---------------------------------------|------------------------------------|
| A. | increased range of facial expressions | increased emotional responsiveness |
| B. | reduced responsiveness to pain | forgetfulness |
| C. | minimal eye movement | inability to forward-plan |
| D. | reduced intelligence | poor organisation skills |

Question 19

People suffering from Parkinson's disease may demonstrate

- A. short, shuffling steps when walking, reduced arm swing and stooped posture.
- B. short, shuffling steps when walking, increased arm swing and stiff upright posture.
- C. longer steps when walking, reduced arm swing and stooped posture.
- D. longer steps when walking, increased arm swing and stiff upright posture.

Question 20

Research into psychological development supports the concept that

- A. psychological and physiological changes occur in discrete and separate stages.
- B. psychological changes occur in discrete and separate stages but physiological changes occur as a continuous process.
- C. physiological changes occur in discrete and separate stages but psychological changes occur as a continuous process.
- D. psychological and physiological changes occur as a continuous process.

Question 21

Which one of the following statements is **not** true of the Diagnostic and Statistical Manual of Mental Disorders (DSM)?

- A. The manual provides a course of treatment for each mental disorder.
- B. The manual provides a diagnosis of a mental disorder based on symptoms.
- C. The manual provides information about a mental disorder based on gender and age.
- D. The manual provides prevalence of a mental disorder.

Question 22

An approach to normality that is based on quantitative data would be the

- A. functional approach.
- B. sociocultural approach.
- C. statistical approach.
- D. situational approach.

Question 23

Marie is concerned about her husband Joseph. Although his position in the company is secure, he constantly worries about his job. The family has a steady income and a healthy bank balance but Joseph is perpetually worried about paying the bills and having sufficient funds for their future.

Joseph most likely has a

- A. generalised fear disorder.
- B. social phobia.
- C. generalised anxiety disorder.
- D. panic disorder.

Question 24

To which category of mental disorders would phobias be classified?

- A. addiction disorders
- B. mood disorders
- C. anxiety disorders
- D. personality disorders

Question 25

Vaughn has a gambling problem.

What could this be a result of?

- A. increased levels of dopamine in Vaughn's brain
- B. Vaughn's belief that he has developed a method that will enable him to win
- C. Vaughn's belief that he can correctly calculate the odds in order to place a successful bet
- D. all of the above

Question 26

Ms Jende was investigating the role of listening to music in learning languages. She divided a sample into two groups; one group listened to music whilst studying a language, and the other group did not listen to music whilst studying a language.

The research method Ms Jende used was

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

Question 27

Phil has been diagnosed with having a psychotic disorder.

Accordingly, Phil will

- A. become violent.
- B. lose his ability to form new memories.
- C. experience a loss of contact from reality.
- D. experience profound personality changes.

Question 28

When treating anxiety disorders, cognitive behavioural therapy (CBT) may be used.

This therapy aims to teach people

- A. how to change their behaviours so that they may change their thoughts and feelings.
- B. that the source of their anxiety is a flawed way of thinking.
- C. that the use of breathing and relaxation techniques will reduce their anxiety.
- D. how to change their thinking patterns so that they may change their behaviours.

Question 29

Perception is

- A. a passive process.
- B. a process by which sensory receptors detect sensory information.
- C. an active process.
- D. a process by which sensory receptors respond to the stimuli.

Question 30

Transduction is the process by which

- A. relevant sensory information is sent to the brain.
- B. sensory energy is changed into a form which may travel along neurons.
- C. sensory energy is processed by the relevant area of the brain.
- D. relevant sensory information is sent away from the brain.

Question 31

The type of energy that provides the stimulus for the sense of vision is

- A. potential energy.
- B. light energy.
- C. vibrational energy.
- D. kinetic energy.

Question 32

The photoreceptors are located in the

- A. cornea.
- B. vitreous humour.
- C. lens.
- D. retina.

Question 33

Which of the following identifies the responsibilities of rods and cones?

| | Rods | Cones |
|----|--|--|
| A. | colour vision and night vision | detecting fine detail and black-and-white vision |
| B. | detecting fine detail and black-and-white vision | colour vision and night vision |
| C. | detecting fine detail and colour vision | black-and-white vision and night vision |
| D. | black-and-white vision and night vision | detecting fine detail and colour vision |

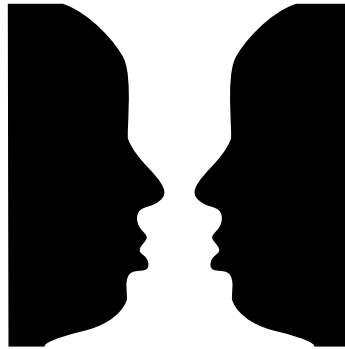
Question 34

The optic nerves converge and partially cross over at the optic

- A. canal.
- B. tract.
- C. junction.
- D. chiasm.

Question 35

Consider the following image.



What type of Gestalt principle would be used in the perception of the above image?

- A. similarity
- B. figure–ground
- C. proximity
- D. differentiation

Question 36

Convergence is a cue used for depth perception.

It involves the brain interpreting the

- A. slight difference in the two images sent by each eye.
- B. converging lines in an image on the retina.
- C. change in tension of the muscles around the eye.
- D. changes in the movements of the two eyeballs.

Question 37

We continue to perceive that a door is rectangular, regardless of the angle from which it is seen.

This is an example of a process called

- A. figure–ground.
- B. shape constancy.
- C. angle constancy.
- D. proximity.

Question 38

Sometimes the emotional state of a person or how they are feeling at a certain time can influence their interpretation of visual information.

This is referred to as

- A. perceptual determination.
- B. perceptual set.
- C. motivational learning.
- D. emotional index.

Question 39

An explanation of the Muller-Lyer illusion from a biological perspective could be the

- A. carpentered world hypothesis.
- B. eye movement theory.
- C. inappropriate application of size constancy.
- D. lack of relevant past experiences and learning.

Question 40

The Ames room is designed to create a visual illusion.

Which of the following identifies the constancy that people are able to maintain and the constancy that they are unable to maintain when viewing the Ames room?

| | Constancy able to maintain | Constancy unable to maintain |
|----|-----------------------------------|-------------------------------------|
| A. | size | shape |
| B. | brightness | size |
| C. | shape | size |
| D. | size | brightness |

Question 41

Jeremiah enjoys listening to soul music and often plays it after work when he arrives home.

What component of his attitude towards soul music is being demonstrated by Jeremiah's enjoyment of soul music?

- A. behavioural
- B. affective
- C. cognitive
- D. social

Use the following information to answer Questions 42 and 43.

Andrea was very pleased when she was appointed the position of manager in her division. She was surprised as she had graduated from her business degree a year earlier and had only been with the company for a year. Andrea was restructuring the department which involved evaluating the roles held by the different employees in her division. She believed that older adults were not as proficient with new technologies as younger adults.

Question 42

Andrea's belief about older people is an example of

- A. bullying.
- B. positive stereotyping.
- C. discrimination.
- D. prejudice.

Question 43

In the restructure, Andrea has not appointed any of the older staff members to the position of team leader.

Andrea's behaviour is perceived to be

- A. stereotyping.
- B. prejudice.
- C. discrimination.
- D. selectivity.

Question 44

Justin needs to have one of his shifts at work covered in the next week. Justin believes that George will help him out by working his shift, as Justin has helped George on a number of occasions previously.

This expectation refers to the social

- A. responsibility norm.
- B. engagement theory.
- C. reciprocity theory.
- D. altruistic theory.

Question 45

Hannah had not been wearing her work uniform correctly and she had been late for her last two shifts. As a consequence, her team leader cut her shifts the following week.

The type of power shown by the team leader is referred to as

- A. expert power.
- B. referent power.
- C. coercive power.
- D. reward power.

Use the following information to answer Questions 46–50.

Simon and Maya were investigating how frequently the students at secondary school used social media on a daily basis. They collected data from the students attending their school through questionnaires which were sent electronically. Of the population of 700 students, 100 students provided responses. The data collected was summarised in the table below.

| Year level | Daily social media use | | | | |
|------------|------------------------|-------------------|-------------------|-------------------|-------|
| | More than 5 hours | Between 3–5 hours | Between 1–3 hours | Less than an hour | Never |
| 7 | 0 | 1 | 9 | 5 | 3 |
| 8 | 10 | 11 | 1 | 0 | 1 |
| 9 | 10 | 8 | 1 | 1 | 0 |
| 10 | 5 | 4 | 1 | 0 | 0 |
| 11 | 4 | 4 | 8 | 1 | 0 |
| 12 | 3 | 2 | 5 | 1 | 1 |

Question 46

The sampling method used by Simon and Maya was

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

Question 47

The type of data Simon and Maya collected was

- A. primary and qualitative.
- B. secondary and qualitative.
- C. primary and quantitative.
- D. secondary and quantitative.

Question 48

The use of questionnaires as a form of data collection is referred to as

- A. an observational study.
- B. a survey.
- C. a self-report.
- D. an experiment.

Question 49

Simon and Maya ensured that the data they collected was kept secure. The data remained anonymous so that it could not be tracked to anyone who participated in the study.

Which ethical principle were Simon and Maya trying to maintain?

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

Question 50

Research has indicated that there is a greater risk to the wellbeing of students who use social media for four or more hours a day.

According to the data collected by Simon and Maya, which year-level students would have the greatest risk?

- A. Year 8
- B. Year 9
- C. Year 10
- D. Year 11

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 (2 marks)

Jean is startled by the sound of a fire alarm.

Identify the branch of Jean's nervous system that was activated in response to the sound of the alarm and identify **two** physiological changes that occurred.

Question 2 (2 marks)

Glial cells and neurons are both important for nervous system functioning. However, they play different roles.

Using the example of a specific type of glial cell, describe the difference between the function of that glial cell and a neuron.

Question 3 (3 marks)

Juan's father suffered a stroke. Following this his father had difficulty in moving the right side of his body.

- a.** Which part of the brain has been affected by the stroke? 1 mark

- b.** Twelve months later, after extensive occupational therapy and physiotherapy, Juan's father was showing great improvement.
Explain the processes that were occurring within Juan's father's brain during his recovery. 2 marks

Question 4 (2 marks)

Identify **two** different types of treatment that are available for people who have Parkinson's disease.

Question 5 (4 marks)

For many years psychologists have researched psychological development through adoption studies.

Using the example of intelligence, explain how these studies contributed towards the roles played by nature (genetics) and nurture (environment).

Question 6 (4 marks)

Soula is interested in Piaget’s theories of development. She has twin seven-year-old boys and a daughter who is eleven. Soula believes that her daughter is developmentally advanced.

- a.** According to Piaget, which stage should Soula’s children be in? 1 mark

- b.** Identify and describe **one** test that Soula could attempt with her children at home to determine if they are still in the same developmental stage, and state the results she would need to confirm her belief. 3 marks

Question 7 (4 marks)

Clearly differentiate between the situational and sociocultural approaches to normality. Provide examples to support your reasoning.

Question 9 (5 marks)

Riku was born prematurely and had to be kept in hospital for the first six weeks of his life. When he came home the family made a fuss over him and his childhood was a happy one. When Riku started VCE his stress levels increased. He felt pressure to achieve to a high standard. Friends of Riku’s encouraged him to smoke marijuana to help him relax. Midway through his VCE Riku began hearing voices. He stopped using his mobile phone as he believed that it was recording his thoughts and that ASIO was tracking his movements. Riku seemed to lose interest in his studies and withdrew into himself, speaking only when absolutely necessary and without much emotion.

His parents were very concerned and took him to a health professional, where he was diagnosed with schizophrenia.

- a.** Identify **two** positive symptoms of schizophrenia that Riku is exhibiting. 2 marks

- b.** Describe **one** negative symptom of schizophrenia that Riku is exhibiting. 1 mark

- c.** Explain the development of Riku’s schizophrenia using the two-hit hypothesis. 2 marks

Question 10 (2 marks)

Consider the human eye.

Describe the structure and function of the lens.

Question 11 (3 marks)

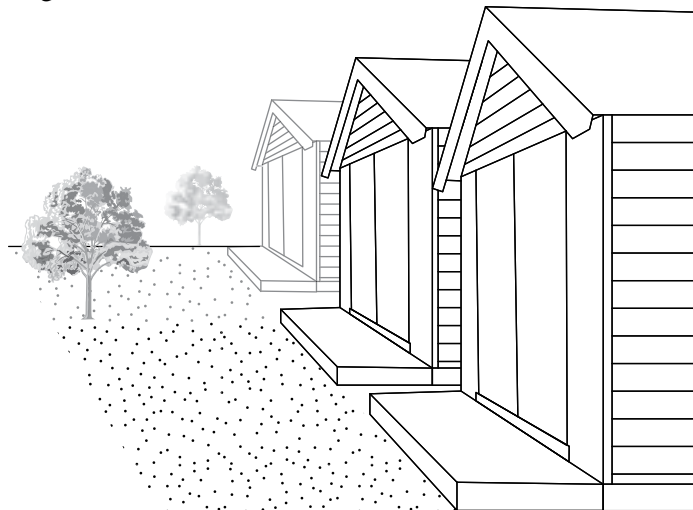
Jasmine is putting on her makeup in front of the bathroom mirror. She notices that when she closes one eye after the other, the image on the mirror seems to shift slightly from side to side.

- a. Why did Jasmine’s face appear to move slightly from side to side? 1 mark

- b. Identify a binocular depth cue and explain how it could assist Jasmine in judging the distance between her face and the image in the mirror. 2 marks

Question 12 (3 marks)

Consider the following image.



Identify and describe **three** depth cues that enable the viewer to perceive the image of the boat sheds as three-dimensional.

Question 13 (10 marks)

Penelope was testing to see if the colour of a jelly would alter the perception of its flavour. She used identically flavoured jelly crystals and used an identical quantity of water. In one cup she added orange colouring, to another she added yellow colouring and to the third cup she added red colouring. Penelope ensured that all jellies were equally intense in the coloration. The type of cups into which the jelly was set were identical. Penelope set up her experiment in the food technology room at school and asked for volunteers from her English class to participate. All participants were asked to describe the flavour of the jelly they were tasting. The results revealed that the majority of students believed the flavour of the orange-coloured jelly to be orange, the yellow-coloured jelly to be lemon and the red-coloured jelly to be raspberry.

- a.** Penelope had predicted that these results would occur.
Explain why she would have predicted this outcome. 2 marks

- b.** Standardised procedures are important in the control of extraneous variables.
Identify **one** way in which Penelope tried to achieve this. 1 mark

- c.** Penelope’s teacher Ms Yumi informed her that for her results to be more reliable should she repeat the experiment several more times.
Explain the reason for Ms Yumi’s instructions. 1 mark

- d.** Penelope is to write a report on her experiment.
In the correct order, identify the main sections of the report she will be required to write. 2 marks

- e.** State **one** purpose of writing a report of psychological research. 1 mark

f. Why did Penelope ask members of her English class rather than her Psychology class to participate? 1 mark

g. Penelope believed that, because the experiment was performed on the students from her own class, she did not need to worry about the normal ethics standards and processes. State if you agree or disagree and provide a reason to support your answer. 2 marks

Question 14 (4 marks)

Explain the difference between old-fashioned prejudice and modern prejudice through the use of examples.

Question 15 (2 marks)

What was the aim of Milgram's study and what conclusion did he reach after completing his research?

Question 16 (2 marks)

How does being part of a crowd or a mob increase conformity?

Question 17 (2 marks)

It is peak hour in the city and the streets are crowded with people on their way home. A man slumps on a bench outside the church in the main street.

Identify **one** factor that would interfere with the man receiving help and **one** factor that could influence a person to provide help.

Question 18 (2 marks)

Using an example, explain how culture may influence taste perception.
