

Trial Examination 2020

VCE Psychology Units 1&2

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	50	50	50
B	21	21	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 23 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

Phrenologists investigated personality by studying

- A. the lines on the palms of the hands.
- B. astrological birth signs.
- C. the bumps on a person's skull.
- D. responses to a series of inkblots.

Question 2

The procedure of removing, destroying or disabling specific parts of the brain is referred to as

- A. electrostimulation of the brain (ESB).
- B. hemispherectomy.
- C. split-brain surgery.
- D. brain ablation.

Question 3

A research hypothesis is a

- A. testable prediction of the relationship between two or more variables within a population.
- B. testable prediction of the relationship between two or more variables within a sample.
- C. prediction of the relationship between two or more variables within a population that cannot always be tested.
- D. prediction of the relationship between two or more variables within a sample that cannot always be tested.

Question 4

Which one of the following is a structural neuroimaging technique?

- A. fMRI
- B. PET
- C. ECG
- D. CT

Question 5

Which division of the nervous system receives information from the sensory receptors?

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

Question 6

Which one of the following is **not** controlled by the autonomic nervous system?

- A. glands
- B. smooth muscles
- C. skeletal muscles
- D. visceral organs such as the lungs

Question 7

The sympathetic nervous system

- A. assists the body to survive when threatened.
- B. detects incoming sensory stimuli.
- C. restores the body to a steady state of functioning.
- D. is active during most of an average person's day.

Question 8

Neurons that transmit information to the brain are referred to as

- A. interneurons.
- B. motor neurons.
- C. efferent neurons
- D. sensory neurons.

Question 9

Microglia are a special type of glial cell.

Which one of the following statements about microglia is correct?

- A. Microglia are found in the peripheral nervous system.
- B. Microglia produce the myelin sheath of neurons.
- C. Microglia act as the main form of immune defence for neurons.
- D. Microglia are shaped like stars.

Question 10

The forebrain contains the

- A. hypothalamus, thalamus and cerebrum.
- B. hypothalamus, thalamus and cerebellum.
- C. pons, medulla and cerebrum.
- D. pons, medulla and cerebellum.

Question 11

From birth, the brain rapidly increases in size and volume until the individual reaches adulthood.

This is due to

- A. an increase in the number of neurons.
- B. an increase in the thickness and size of neurons.
- C. the development of myelin.
- D. the development of glial cells.

Question 12

Dr James was studying bullying behaviours in Victorian primary schools. She used a questionnaire that included questions asking students to rate their experiences at school on a scale of 1 to 5, 1 being very bad and 5 being very good.

The data collected by Dr James was

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

Question 13

When conducting studies, researchers aim to control

- A. all variables.
- B. the independent variable.
- C. the dependent variable.
- D. extraneous variables.

Question 14

In 1848, Phineas Gage was the foreman to a construction crew working on laying new railway tracks. As Gage was packing down some gunpowder with a metal rod, a spark ignited the gunpowder and the rod shot through his left cheek and out through the top of his skull. Immediately after the accident, no major psychological changes in Gage were noticed, but changes became evident as time progressed.

Some of the psychological changes that were noticed in Gage included difficulty

- A. with motor activities.
- B. maintaining relationships with his friends.
- C. keeping a job.
- D. with goal-directed behaviour and planning.

Question 15

Spatial neglect is a neurological disorder.

The area of the brain that is most commonly affected in cases of spatial neglect is the

- A. visual cortex.
- B. temporal lobe.
- C. motor cortex.
- D. parietal lobe.

Question 16

Parkinson's disease is a progressive neurodegenerative disease.

Which one of the following statements about Parkinson's disease is correct?

- A. In cases of Parkinson's disease, there is an over-production of the neurotransmitter dopamine.
- B. Parkinson's disease is caused by genetic factors.
- C. An early symptom of Parkinson's disease is the loss of taste.
- D. Age is the most significant risk factor for developing Parkinson's disease.

Question 17

Monozygotic twins are important for research in human development.

Monozygotic twins

- A. have identical genotypes and phenotypes.
- B. are conceived when one sperm fertilises one ovum.
- C. have the same phenotype but different genotypes.
- D. are conceived when two sperm fertilise two ova.

Question 18

The sensitive period in which a person learns their first language

- A. continues throughout their life, although it gradually weakens from adolescence.
- B. finishes at the age of seven.
- C. continues to the age of twelve, although it gradually weakens from the age of seven.
- D. continues throughout childhood, although it weakens during the latter part of adolescence.

Question 19

In Ainsworth's test, when the caregiver of an infant leaves the room and leaves the infant alone with a stranger, the infant cries.

In this test the infant demonstrates

- A. stranger anxiety.
- B. disorganised attachment.
- C. insecure resistant attachment.
- D. separation anxiety.

Question 20

Aria, Audrey and Joanne are playing in the backyard at Aria's house. They find a large box and sit inside it, pretending to have a tea party.

According to Piaget, the children are

- A. in the sensorimotor stage of development.
- B. demonstrating egocentrism.
- C. demonstrating symbolic thinking.
- D. in the concrete operational stage of development.

Question 21

Erikson developed a psychosocial theory of development.

According to his theory, the psychosocial crisis of autonomy versus shame and doubt occurs between the ages of

- A. 18 months to 3 years.
- B. 3 to 5 years.
- C. 5 to 12 years.
- D. 12 to 18 years.

Question 22

Which one of the following social factors could contribute to a mental disorder?

- A. very high levels of a neurotransmitter, such as dopamine
- B. genetic vulnerability
- C. persistent bullying in the workplace
- D. behaviours that are atypical for an individual

Question 23

A mental health problem may be described as a

- A. psychological condition diagnosed by a psychologist or similar healthcare professional.
- B. mental health condition that may resolve itself in time.
- C. mental health condition that interferes with everyday functioning.
- D. psychological condition that requires medication in order for successful treatment to occur.

Question 24

One day, Michael was listening to the radio in his car, when he heard the radio announcer directing comments at him personally. He thought it was a coincidence. However, over the following week, he noticed that on every radio station he listened to, the announcer was sending him personal messages.

Michael was experiencing delusions of

- A. control.
- B. persecution.
- C. grandeur.
- D. reference.

Question 25

A positive symptom of schizophrenia is

- A. feeling positive about the future.
- B. loss of motivation.
- C. hallucinations.
- D. affective flattening.

Question 26

Which one of the following is the part of the eye that controls the amount of light that may enter?

- A. cornea
- B. pupil
- C. lens
- D. iris

Question 27

The area in the centre of the retina where there is a high concentration of cones is called the

- A. blind spot.
- B. fovea.
- C. optic nerve.
- D. macula.

Question 28

Which one of the following refers to the Gestalt principles of visual perception?

- A. the use of binocular cues
- B. the use of monocular cues
- C. the way we organise features of a visual scene to perceive them as an entire form
- D. the way we view an overall form and deconstruct it into its individual parts

Question 29

Jezlyn was running late for the inter-school swimming carnival. She was worried that when she arrived she would have difficulty locating her school among all the other schools present. However, all the students at the swimming carnival were wearing their school uniforms, so Jezlyn did not have any problem finding her school in the crowd immediately.

Which Gestalt principle helped Jezlyn to identify her school among the others in the crowd?

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

Question 30

Retinal disparity helps to determine depth or distance because the

- A. tension in the ocular muscles sends a message to the brain.
- B. brain compares the differences in the retinal images sent from the left and right eyes.
- C. lens in the eye bulges as an object comes closer to the person viewing the object.
- D. image on the right retina is slightly smaller than the image on the left retina.

Use the following information to answer Questions 31 and 32.

Ms Spencer was a teacher at White Hall Primary School. After several discussions with her colleagues and with teachers from other primary schools, Ms Spencer believed that primary school children who consume food and drinks that are high in sugar struggle to concentrate in class. She decided to formally study whether sugar consumption affected concentration in primary school children. Ms Spencer gained permission from her school's principal to test students at White Hall Primary School. She decided to test her own Grade Four class as this would allow her to make better and regular observations.

Question 31

The population and sample of the study were, respectively,

- A. White Hall Primary School students and Ms Spencer's Grade Four class.
- B. primary school children and White Hall Primary School students.
- C. White Hall Primary School students and primary school children.
- D. primary school children and Ms Spencer's Grade Four class.

Question 32

The sampling method used by Ms Spencer in the study was

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

Question 33

Joel and Harry went to the AFL Grand Final together. Joel was a passionate fan of Collingwood and Harry was an avid supporter of Melbourne. At one point in the game, a physical fight broke out between two players, one from Collingwood and one from Melbourne. Joel yelled at the umpire to penalise the Melbourne player because he had tackled too high. Harry disagreed. He told Joel that the tackle was fair and the only problem was the Collingwood player's poor skills.

Joel and Harry's perception of the same event varied due to

- A. culture.
- B. past experience.
- C. context.
- D. motivation.

Question 34

After taste receptors are stimulated, they send signals to the brain along the

- A. cranial nerves to the thalamus and then to the gustatory cortex.
- B. cranial nerves to the gustatory cortex and then to the thalamus.
- C. gustatory nerves to the thalamus and then to the cortex.
- D. gustatory nerves to the gustatory cortex and then to the thalamus.

Question 35

Which one of the following is **not** a factor that influences taste perception?

- A. food packaging
- B. genetics
- C. age
- D. gender

Question 36

Grandpa Charles told his grandchildren that food tasted better when he was younger.

This difference in taste could be due to adults

- A. developing a better sense of smell.
- B. having fewer taste buds.
- C. having more taste buds.
- D. being supertasters.

Question 37

Phil investigated the difference in intelligence between children raised in the city area of Melbourne and in rural areas outside of Melbourne. After the testing was completed, Phil collated and analysed his data.

If Phil was interested in the spread of the data, which one of the following would he calculate?

- A. mean
- B. standard deviation
- C. mode
- D. median

Question 38

When an individual has synaesthesia, the experience of the condition

- A. may be suppressed when needed.
- B. can sometimes be imagined by the individual.
- C. is involuntary.
- D. varies in intensity each time.

Use the following information to answer Questions 39–41.

Leia was testing how food packaging can affect teenagers' perception of the flavour of chocolate. She obtained a sample of 1000 teenagers who volunteered to take part in her investigation by responding to an advertisement on Facebook. The first chocolate sampled in the study was in plain packaging, and the participants rated the flavour on a scale of one to five. After the participants drank some cold water and ate dry crackers, they were asked to taste the second chocolate, presented in attractive packaging, and again provide a rating on a scale of one to five. The chocolate was the same in both conditions. All participants received the same amount of chocolate in both conditions.

Question 39

The research design used by Leia was

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

Question 40

The flavour of the chocolate, as indicated by the participants' rating on the scale of one to five was

- A. a confounding variable.
- B. the independent variable.
- C. the dependent variable.
- D. an extraneous variable.

Question 41

When interpreting the collected data, an advantage of using the rating scale is that it

- A. provides opinions given by participants.
- B. provides qualitative data.
- C. provides quantitative data.
- D. is a self-report.

Question 42

A personal attribution is

- A. an internal factor.
- B. an external factor.
- C. dependent on the actions of another individual.
- D. dependent on environmental factors.

Question 43

Jessica enjoys going for a run at least twice a week and believes that regular exercise is good for her health.

Which component of the tri-component model of attitudes is represented by Jessica enjoying going for a run at least twice a week?

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

Question 44

A new brand of potato chips has come on the market and is being advertised on television, in magazines and on Facebook feeds. Julian visits the local shop to buy chips. He sees the new brand of chips and decides that, even though he has not tried them before, he will purchase a packet.

Julian has developed a positive attitude towards the new brand of chips due to

- A. social learning.
- B. direct instruction.
- C. operant conditioning.
- D. repeated exposure.

Question 45

Modern prejudice, as opposed to old-fashioned prejudice, is best described as

- A. consciously held and actively thought about by an individual.
- B. openly stated by an individual.
- C. more subtle and may be held unconsciously by an individual.
- D. explicit prejudice.

Question 46

Which one of the following examples is a group?

- A. two people playing a game of cards
- B. twelve people waiting in a queue to use an ATM
- C. twenty people in a small cinema watching a movie
- D. fifty people in a football club watching the local team play a game

Question 47

Kiya, Jason, Tim and Mia were working on a group project together. The project required them to present their research in the form of a movie. Kiya studies media. She made herself group captain and allocated tasks to each group member.

In this scenario, what type of power was held by Kiya?

- A. expert
- B. legitimate
- C. coercive
- D. referent

Question 48

Sam was training to be a nurse. As he walked home from university, he noticed a young man fall off his skateboard. Sam, along with a crowd of other people, gathered to look at the man lying on the concrete. As the man cried out in pain, Sam did not step forward to offer help as he was embarrassed that other people would judge his skills and actions.

Sam's actions are an example of

- A. the bystander effect.
- B. cost-benefit analysis.
- C. the diffusion of responsibility.
- D. audience inhibition.

Question 49

Kendall is in her final year of study to become a paramedic. After class, she finds out that she was not accepted to take part in a special overseas program. Kendall is angry and upset and decides to walk home. On her way, she passes by an almost empty café and notices a girl holding her hands to her chest, her shoulders heaving as she struggles to take a breath. Kendall briefly pauses, then continues on her way.

Which factor most likely stopped Kendall from helping the girl?

- A. being in a bad mood
- B. not noticing the situation
- C. diffusion of responsibility
- D. lack of competence

Question 50

Research has indicated that children are more likely to become bullies if they

- A. are indulged or spoilt by their parents when they are young.
- B. are failing in school.
- C. come from dysfunctional families.
- D. play a lot of sports when they are young.

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)

Describe René Descartes' theory of dualism.

Question 2 (2 marks)

Neurosurgeon Wilder Penfield made a significant contribution to psychology and medicine when he mapped the cortical areas of the brain.

Identify and describe the technique used by Penfield that enabled him to construct the cortical map.

Question 3 (3 marks)

Liliana and Alex were having lunch under the shade of a tree. Suddenly, their friend Amelie jumped out from behind the tree, scaring them. They screamed loudly.

- a.** Identify **one** possible physiological change in Liliana and Alex's functioning. 1 mark

- b.** Identify the branch of the nervous system that was responsible for the changes. 1 mark

- c.** When Liliana and Alex realised that their friend Amelie was playing a joke on them, they laughed about their reaction.

Which division of the nervous system was activated in Liliana and Alex? 1 mark

Question 4 (1 mark)

What is the function of a synapse?

Question 5 (2 marks)

Explain why an adult has far fewer synapses than a three-year-old child.

Question 6 (4 marks)

Adaptive plasticity often occurs following a brain injury.

Identify and describe **two** neuronal mechanisms by which the brain is able to recover.

Question 7 (5 marks)

Parkinson's disease affects just over 82 000 Australians.

- a.** Identify **one** motor symptom and **one** non-motor symptom of the disease. 2 marks

- b.** Researchers working in the field of Parkinson's disease use animals to assist with their research. Identify **one** contribution to the treatment of Parkinson's that is due to animal research. 1 mark

- c.** Identify **one** functional neuroimaging technique that has assisted in the understanding of Parkinson's disease and explain how it has assisted in the understanding of the disease. 2 marks

Question 8 (2 marks)

Fran gave birth to identical twin girls, Lauren and Charlie. It was very difficult to tell the twins apart when they were infants. However, when the twins were in Grade 6, they showed obvious differences. Charlie spent most of her time inside, either drawing or painting, while Lauren was part of an outdoors swimming team. Lauren was taller, more muscular and a faster swimmer than Charlie. Lauren's skin was more tanned and her hair a lighter shade of brown than Charlie's.

Identify the influences of nature and nurture on the similarities and differences of the twins.

Question 9 (2 marks)

Isaac was excited when his cat Lulu gave birth to a litter of four kittens. One of the kittens was born with her left eyelid sealed, so she could only use her right eye. When the kitten was three months old, the vet operated on her left eyelid so that she could open her eye. However, the kitten never gained full eyesight in her left eye.

Explain why the kitten never gained full eyesight in her left eye.

Question 10 (2 marks)

Identify and describe **one** key accomplishment in the cognitive ability of a child who has moved from the concrete operational stage of Piaget's theory to the formal operational stage.

Question 11 (2 marks)

Explain how maladaptive behaviours can be considered to be dysfunctional behaviours. In your response, refer to **one** example.

Question 12 (2 marks)

Describe self-stigma and explain how it can interfere with treatment.

Question 13 (5 marks)

Schizophrenia is a psychotic disorder.

- a.** Identify and describe **two** negative symptoms that may be experienced by a person with schizophrenia. 2 marks

- b.** In terms of the two-hit hypothesis, what are the **two** 'hits' required for schizophrenia to develop within an individual? 2 marks

- c.** What is the main treatment for schizophrenia? 1 mark

Question 14 (3 marks)

Transduction and transmission are important parts of visual perception.

- a.** Describe the process of transduction and identify where it occurs in the eye. 2 marks

- b.** Describe the process of transmission in the visual perception system. 1 mark

Question 15 (9 marks)

Taylah is learning to be a chef. During her classes, she learns that the texture of food is a tactile sensation and has a significant impact on flavour.

- a.** Explain how texture can affect the flavour of foods. Give **one** example in your response. 2 marks

Taylah's teacher, Patrick, sets his class a practical investigation. Patrick had noticed in his experience as a chef that Australians seemed to prefer a thick, creamy custard. The class will investigate how the consistency of custard affects the perception of flavour. The investigation will use two custards: one that is thick and creamy, and one that is thin and runny. Participants will rate the flavour of the custard on a scale of one to five.

Patrick advertises for volunteers to partake in the study. The advertisement warns people that if they suffer from lactose intolerance or other food allergies they should not participate. Taylah is very excited when she sees that forty people have volunteered.

- b.** State the independent variable in the investigation. 1 mark

- c.** State the dependent variable in the investigation. 1 mark

- d.** Write a research hypothesis for the investigation. 3 marks

Taylah must prepare the food technology room before the participants arrive and the experiment can be conducted.

- e.** When setting up the experiment, Taylah wants to ensure that the impact of extraneous variables is minimised through standardised procedures.

Identify **two** ways that Taylah could set up the experiment to accomplish this. 2 marks

Question 16 (2 marks)

Joe is driving from Melbourne to Sydney to visit his family. Joe left immediately after work and did not stop for dinner in order to avoid peak hour traffic. After four hours of driving, Joe is feeling very hungry. A sign in the near distance catches his attention and he is elated. The sign says 'Food Stop'. However, when Joe looks at the sign again he realises that it actually says 'Fuel Stop'.

Explain why Joe may have made this error.

Question 17 (3 marks)

The tri-component model of attitudes is widely used in psychology. However, the model does have limitations, including a lack of consistency between some of its components.

Using the tri-component model, describe an example of an inconsistent attitude.

Question 18 (3 marks)

Solomon Asch conducted research into conformity. Through his work it was revealed that there are a number of factors that influence conformity.

Identify **three** factors that influence conformity within a group.

Question 19 (4 marks)

In the southern states of the United States of America in the late 1960s and early 1970s, racial tensions between African American and Caucasian American people were high. Students attending school were segregated according to their racial background.

In Virginia, in 1971, three segregated public high schools were integrated so that students of all racial backgrounds were enrolled in a single school, T.C. Williams High School. The school was well known for its football team, the Titans. When the African American students and coach joined the all-Caucasian team, there was resentment and animosity between the players of different racial backgrounds. The two coaches realised that the players had to overcome these problems if the Titans were to be successful as a team. One strategy adopted by the coaches was to take the Titans to Gettysberg for a week-long training camp.

Identify and describe **two** methods that could have been used during the training camp to help reduce prejudice between players of different racial backgrounds.

Question 20 (2 marks)

Gillian is a psychology student investigating social behaviours. She decided to run a simple experiment. Gillian would step into a university elevator while carrying an armful of books and pretend to accidentally drop her keys. When between five to ten other people were in the elevator, the offers to help Gillian were far fewer compared to when Gillian was in the elevator with only one other person.

Describe why there was a difference in helping behaviour in the two conditions.

22

[illegible]

VCE Psychology Units 1&2

Written Examination

Multiple-choice Answer Sheet

Student's Name: _____

Teacher's Name: _____

Instructions

Use a **pencil** for **all** entries. If you make a mistake, **erase** the incorrect answer – **do not** cross it out. Marks will **not** be deducted for incorrect answers.

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

All answers must be completed like this example:

A	B	C	D
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Use pencil only

1	A	B	C	D
2	A	B	C	D
3	A	B	C	D
4	A	B	C	D
5	A	B	C	D
6	A	B	C	D
7	A	B	C	D
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9	A	B	C	D
10	A	B	C	D
11	A	B	C	D
12	A	B	C	D
13	A	B	C	D
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17	A	B	C	D

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25	A	B	C	D
26	A	B	C	D
27	A	B	C	D
28	A	B	C	D
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45	A	B	C	D
46	A	B	C	D
47	A	B	C	D
48	A	B	C	D
49	A	B	C	D
50	A	B	C	D