

Trial Examination 2018

VCE Psychology Unit 2

Written Examination

Suggested Solutions

SECTION A – MULTIPLE-CHOICE QUESTIONS

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
8	A	B	C	D
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
14	A	B	C	D
15	A	B	C	D
16	A	B	C	D
17	A	B	C	D
18	A	B	C	D
19	A	B	C	D
20	A	B	C	D
21	A	B	C	D
22	A	B	C	D
23	A	B	C	D
24	A	B	C	D
25	A	B	C	D
26	A	B	C	D
27	A	B	C	D
28	A	B	C	D
29	A	B	C	D
30	A	B	C	D
31	A	B	C	D
32	A	B	C	D
33	A	B	C	D
34	A	B	C	D
35	A	B	C	D
36	A	B	C	D
37	A	B	C	D
38	A	B	C	D
39	A	B	C	D
40	A	B	C	D

Question 1 C

Perception is more than just the passive process of receiving information. It is an active process.

Question 2 B

Transduction is the process by which raw sensory energy is changed into a form which may travel along neurons. Transmission is the method of relevant sensory information being sent to the brain (not away). Sensory energy is changed before eventually being processed by the relevant area of the brain.

Question 3 B

The type of energy that provides the stimulus for the sense of vision is light energy. Potential energy is stored energy. Vibrational energy is the energy important to sound reception. Kinetic energy is the energy of movement.

Question 4 D

The taste receptors are located in the taste buds. The taste buds are located within the papillae. The taste pores are on the surface of the tongue; they open into the taste bud. A fine hair detects tastants and extends from the taste pores to the taste buds.

Question 5 B

The primary gustatory cortex is located within the frontal lobe. The primary somatosensory cortex is located within the parietal cortex. The auditory cortex is located within the temporal lobe. The visual cortex is located within the occipital lobe.

Question 6 A

The lens refracts the light rays so that they converge and focus on the retina. The iris controls the size of the pupil. The retina is the layer of photoreceptors at the back of the eye.

Question 7 C

The structure within the eye that controls the amount of light entering the eye is the iris. It controls the size of the pupil, the opening through which light enters the eye. The sclera is the outer layer of the eye ball.

Question 8 B

It is believed that as people age their taste perception changes. This is largely due to a decreased ability to smell. With ageing the number of taste buds can decrease but this is not considered to be the most important factor in loss of the sense of taste as people already lose taste buds before old age.

Question 9 D

The photoreceptors are located in the retina at the back of the inside of the eye. The cornea is the thin, transparent layer covering the eye. The lens is transparent and biconcave in shape. Its main function is to focus light rays on the photoreceptors in the retina. The vitreous humour is a transparent jelly-like fluid filling the eyeball behind the lens.

Question 10 D

Rods and cones are both photoreceptors located within the retina. Although both are stimulated by light and are responsible for changing the light energy into a form that can be transmitted through the nervous system, there are differences. Rods are more numerous than cones and they are very sensitive to light. They enable people to see in dim light conditions such as at night. They are responsible for black-and-white vision. Cones are located predominantly within the central section of the retina. They require higher intensity of light and are responsible for detecting fine detail and colour vision.

Question 11 D

The optic nerves leave from the back of each eye. They converge and partially cross over at the optic chiasm before continuing as the optic tract to the optic cortex within the occipital lobe in the rear of the brain.

Question 12 B

The Gestalt principle used in the perception of the given image is figure–ground. The contour line helps delineate the figure so that it stands out against the background.

Question 13 C

Convergence is a cue used for depth perception. It is a binocular cue. It involves the brain interpreting the change in tension of the extra-ocular muscles as the eyes start to converge (come together) to look at a close object (looking cross-eyed). It is only effective for objects that are within ten meters of the person.

Question 14 B

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 shape constancy. Figure–ground and proximity are both Gestalt principles.

Question 15 B

This is referred to as perceptual set. Expectations, emotions, motivation and culture are all factors that can influence our perception.

Question 16 B

An explanation of the Muller-Lyer illusion from a biological perspective could be the eye-movement theory. It suggests the two different lines require different amounts of eye movements. The feather-headed arrow requires a longer sweep than the arrow headed line. A carpentered world hypothesis is from a psychological perspective. The inappropriate application of size constancy applies to the Ames room. A lack of relevant past experiences and learning would be from a social/cultural perspective.

Question 17 C

The Ames room is designed to create a visual illusion. When viewing the Ames room, people are able to maintain shape constancy but are unable to maintain size constancy. In the absence of binocular cues it is difficult to maintain size constancy.

Question 18 B

The same participants were used in the control group and treatment (experimental) group. Thus the research design was repeated measures. For it to be independent groups, there would have been two separate groups of participants for control and treatment groups. For the study to be matched, participants within the two groups would have been matched for certain characteristics such as gender, age and intelligence.

Question 19 D

Sancha sees the colour red whenever she sees the number five. Sancha has synaesthesia, a condition in which stimulation of one sensory pathway leads to automatic, involuntary experiences in a second sensory pathway. Aphasia refers to a language disorder of the brain. Dyslexia refers to a learning difficulty with reading, writing and spelling.

Question 20 D

The flavour of food is a multi-sensory experience. It is determined by the taste and smell of the food; its texture; its temperature; the auditory sensations and visual sensations. Thus, the solution is **D**.

Question 21 C

Anthony believed that his poor result was due to external factors that he could not control. However, he believed that Conrad's poor performance was due to internal, personal factors that were under Conrad's control. This is actor-observer bias. It refers to a tendency to attribute one's own actions to external causes, while attributing other people's behaviors to internal causes. The fundamental attribution error attributes the behaviors of others to their own actions and does not take into account the impact of situational factors. The self-serving bias occurs when a person attributes their successes to internal factors, and their failures to external factors.

Question 22 A

The action of playing the music is a behavioural component of attitudes. The affective component is the emotional/feeling part of the attitude. The cognitive component would be his set of beliefs about the music.

Question 23 C

Celebrities are used as the model in observational learning (which is a form of social learning) because models with high status improve the attention paid to the model. This enhances the learning taking place. Operant conditioning involves learning by consequence and with classical conditioning there is a passive association between two stimuli to produce a response.

Question 24 D

Andrea's belief about older people is an example of prejudice. It is an attitude based on stereotyping all older people as being incompetent with new technologies. It is not discrimination as this is behavioural.

Question 25 C

Andrea's actions of not promoting older staff members to become team leaders is discrimination. This is based upon her prejudice.

Question 26 C

Justin has helped George previously, and according to the social reciprocity theory he would expect that George would return the favour by helping him. The social responsibility norm is not evident here as this proposes that we should help others because it is our duty to do so. Altruism involves giving help without the expectation of receiving anything in return.

Question 27 C

Hannah's team leader is exercising coercive power as, by cutting Hannah's shifts, he has provided negative consequences in response to her behaviours of being late and in incorrect uniform. It is not reward power as Hannah has not received a positive outcome from the team leader. It is more specific than legitimate power, which confers the right to exercise power due to their status or position in the business. Expert power involves a person having power due to the possession of skills or knowledge.

Question 28 A

The aim of Zimbardo's Stanford Prison Experiment was to determine if people would change their behaviours when ascribed the social roles of either prison guard or prisoner in a mock prison environment. This would enable Zimbardo to study the behaviours of the participants that would occur as a consequence of their expectations of the ascribed roles.

Question 29 D

Withdrawal rights are the right of a participant in psychological research to leave the experiment. In Zimbardo's experiment this right was not exercised. The other ethical principles listed, although relevant to Zimbardo's study, were not applicable in the given scenario of the question.

Question 30 C

When the 'experimenter' or the authority figure was in a different room to the 'teacher', the level of obedience to that authority figure diminished. Having a legitimate authority figure in a reputable establishment contributed to obedience.

Question 31 D

Felix is not a strong swimmer and does not believe that he is able to help the man in trouble. Thus, this is an issue of competence that interferes with Felix providing help. He has noticed the situation and interpreted that the man is in need of help. His mood would not impact upon his helping behaviours in this case.

Question 32 B

The example of excluding someone socially at lunchtime is not an online experience. The other examples are online experiences.

Question 33 C

Participants that volunteer, reply to advertisements or are chosen due to the opportunity that arises for the researcher become part of the study through convenience sampling.

Question 34 C

Simon and Maya collected the data themselves, making it primary (first-hand data). It was in the form of numbers, making it quantitative data.

Question 35 C

A self-report requires participants to provide answers to questions asked in the questionnaire. This can be written or verbal. A survey is of a similar nature as they are also used to collect self-report data. Observational studies involve collection of data by researchers when they watch and record behaviours. Experiments are set to study the cause and effect of relationships.

Question 36 D

The researchers have not used or disclosed private information of the participants, which means that they have upheld their responsibility to maintain confidentiality. Beneficence refers to the beneficial outcomes that result from the research whilst being vigilant that no harm befalls the participants. Voluntary participation means that the participants have willingly elected to take part with no coercion from the researcher. Informed consent refers to the provision of sufficient information about the nature of the proposed study so that the participants can make a decision about whether they would like to participate.

Question 37 A

According to their data Year 8 would be more at risk (21 students). Year 9 would be 18 students, Year 10 would be 9 students and Year 11 would be 8 students.

Question 38 C

A placebo effect occurs when there is a change in the behaviours of participants due to the use of a false treatment or substance (placebo) that produces an expectation that change will occur. Hence the participants taking the placebo in this experiment reported improvements in their symptoms because of the expectancy that improvement would occur. Placebos are used to help minimise variables.

Question 39 D

Allocation refers to the process by which participants that form the sample can be assigned into control or treatment (experimental) groups. This is different to sampling, which is a process that selects participants from the wider population. The word random means that each participant has an equal chance of being selected. Hence, in random allocation the participants have equal chances of being placed in control or treatment groups.

Question 40 D

The experimental group, or treatment group, is the group to which the independent variable (or treatment) has been applied. The control group is used as a standard or a comparison and therefore, no treatment has been applied.

SECTION B

Question 1 (2 marks)

The lens is a transparent, bi-convex, flexible structure located behind the pupil. 1 mark

Its function is to focus light rays on the retina at the back of the eye. 1 mark

Question 2 (2 marks)

The Gestalt principle is figure–ground. 1 mark

When the contour line is not easily seen and the figure does not stand out from the background then camouflage occurs. Hence if the outline of the soldiers does not stand out from their background the soldiers will blend into their background and be camouflaged. 1 mark

Question 3 (3 marks)

a. Jasmine’s face appears to move slightly from side to side due to retinal disparity. The image on the retina of each eye is slightly different due to the position of the nose in between the eyes. 1 mark

b. convergence 1 mark

This is where Jasmine’s brain detects changes in tension in her eye muscles as her two eyes turn inwards to focus on her image in the mirror. 1 mark

Question 4 (3 marks)

Any three of:

- **Interposition:** One beach hut partially blocks another one behind it, which leads the viewer to perceive the one that is blocked as being further away than the beach hut that obscures it.
 - **Texture gradient:** The details of the texture of the sand can be seen clearly in the foreground. However, as we look further back in the picture the texture cannot be seen. It seems blurred.
 - **Relative size:** The larger beach huts are perceived as being closer as the image on the retina is much bigger. The beach huts that produce a smaller image on the retina are perceived as being further in the distance
 - **Height in the visual field:** Beach huts that are closer to the horizon are perceived as being further in the distance.
- 3 marks

Question 5 (2 marks)

Jacqueline and Thuy support opposing teams and are emotionally involved in supporting their own teams. 1 mark

Thus there is an expectation or readiness to perceive the fight on the field in accordance with their allegiance for their team. 1 mark

The visual stimulus is identical but the motivation to perceive the event is different.

Question 6 (10 marks)

- a.** Penelope was aware that colour has an important influence on taste perception. She predicted that the participants would have used the visual cue of the colour to determine the flavour. 1 mark
- The colour red is commonly associated with raspberry flavours, orange with orange flavours and yellow with lemon flavours, and these would probably be the outcomes in her experiment. 1 mark
- b.** *Any one of:*
- the same flavoured jelly crystals
 - the same quantity of water
 - the same type of cups
 - the intensity of the colours of each jelly were identical
- 1 mark
- c.** Ms Yumi asked Penelope to repeat her test a few times to see if the test produced results that were consistent. This consistency indicates reliability. 1 mark
- d.** The main sections in the report would be in the following order:
- introduction
 - method
 - results
 - discussion
- 2 marks
- Note: Students may add abstract and references.
Award 1 mark for all but one section given.*
- e.** *Any one of:*
- to disseminate the research findings with others, especially other researchers who may share similar interests
 - to enable replication of the study to test the validity and reliability of its results
- 1 mark
- f.** The prior knowledge of the subject material could cause a change in behaviour of the Psychology students, thereby creating an extraneous variable. (Some students may identify this as demand characteristics.) English students would not have any prior knowledge (naive). 1 mark
- g.** disagree 1 mark
- Ethical standards and processes are put into place for all people who participate in research to ensure that their wellbeing and rights are protected both during and after research. Penelope must uphold the principle of integrity as a researcher with her peers, just as she would for any other participant involved in research. 1 mark

Question 7 (2 marks)

For example:

Katy Perry is commonly held to be a highly attractive person and, as a consequence of the halo effect, most people would like to believe that she also has positive qualities such as being kind, caring, good-humored and happy.

1 mark

That is, her quality of being attractive affects our perception of her other characteristics.

1 mark

Note: 1 mark for an example as long as it is appropriate.

Question 8 (2 marks)

The person would be more likely to not buy cosmetics that use animals for testing if they held a strong attitude towards this issue.

1 mark

The attitude against animal testing must be well known so that it comes easily into their thoughts, particularly when shopping for products.

1 mark

Note: Students may refer to social context or an individual's belief in their own power being sufficient.

Question 9 (4 marks)

An old-fashioned prejudice is from a majority group to a minority group and is overt and very obvious. For example, Janet believes that people with light-coloured skin are superior to people with dark-coloured skin and the groups should be segregated.

A modern prejudice is from a majority group to a minority group, but is more subtle and covert when compared to an old-fashioned prejudice. For example, Peter believes that people of Indigenous descent are given more opportunities for land rights, which is not fair as all people should be given the same opportunities.

4 marks

1 mark for an example of old fashioned prejudice.

1 mark for explanation of old fashioned prejudice.

1 mark for an example of modern prejudice.

1 mark for explanation of modern prejudice.

Question 10 (2 marks)

The aim of Milgram's study was to investigate whether people would obey an authority figure even if it meant that they were inflicting pain and harm to another person.

1 mark

The conclusion of Milgram's study was that the majority of people would obey the commands of an authority figure even if it meant inflicting pain and harm to another person.

1 mark

Question 11 (2 marks)

In individualistic cultures where the individual's needs are put before the needs of the community, there tends to be less conformity; for example, the American culture.

1 mark

In contrast, in collectivist cultures such as Korea, where group goals are deemed more important than individual goals, conformity is higher.

1 mark

Question 12 (2 marks)

When an individual becomes part of a mob or a crowd they experience deindividuation. In the crowd they feel that they are less likely to be identified, that is they feel more anonymous.

1 mark

Their attention is also shifted from themselves to the actions of the group. These two factors make the person more likely to conform.

1 mark

Question 13 (2 marks)

For interfering factors, any one of:

- **Diffusion of responsibility:** People assume that someone else in the crowd will take responsibility to help the man and so they do not.
- **Audience inhibition:** The person will not help the man for risk of appearing foolish.
- **Cost-benefit analysis:** If the person believes that the cost to themselves outweighs the benefits of helping, then they will not help the man on the street.

1 mark

For helping factors, any one of:

- They notice the man on the ground.
- They interpret that the man needs help.
- They are prepared to take responsibility.
- They believe that someone else would help them if they were in a similar situation.
- They feel it is their social responsibility.
- The person feels competent in delivering help.
- The person is in a good mood.
- The person shares some similarities with the person needing help; that is, they identify with that person.
- They have seen other people offering help.

1 mark

Question 14 (2 marks)

Foods that are part of the cultural upbringing are perceived more positively than foods that are unfamiliar. For example, Jane was brought up in Ballarat by her Australia-born parents and does not enjoy hot, spicy foods as they were not part of her diet while she was growing up. She prefers familiar foods such as roast lamb.

2 marks

*1 mark for explanation.**1 mark for example.*

Question 15 (10 marks)

The incidence of bullying in Australian primary and secondary schools is relatively high, with at least one in four students having experienced bullying of some form. Bullying is a form of aggressive behaviour that is ongoing, intentional and involves an imbalance and misuse of power. It can be verbal, physical and/or social behaviours that can cause physical and/or psychological harm. Bullying behaviours may be one-on-one or involve groups.

Types of Bullying

Four main types of bullying have been identified. They include:

- **Physical bullying:** This involves physically hurting another person by, for example, hitting, kicking or punching. It could also involve damage to, theft of, or hiding another person's belongings.
- **Verbal bullying:** This involves calling someone names, racial abuse, teasing, intimidation or homophobic comments.
- **Social bullying:** This is also referred to as covert bullying is a form of bullying that is not as easy to detect. It is designed to cause humiliation to another person or to damage their reputation socially. This includes behaviours such as spreading false rumours, mimicking someone's actions or words or encouraging others to socially exclude someone.
- **Cyberbullying:** This involves the use of digital technologies, including computers, mobiles, social media, text messages, image sharing, hate sites, identity theft, pranking or similar activities. Cyberbullying is insidious as it can happen anywhere, at any time, alone or in public.

Causes of Bullying

There are a number of theories that try to explain the causes of bullying. One approach is to consider the characteristics of the individuals themselves. For example, the psychological and social characteristics of the individual may be that the individual is aggressive and wants to consistently dominate in any situation. They may lack understanding of correct and appropriate social behaviours and codes of conduct. A second approach is to consider the social-ecological perspective. The bullying behaviours may come from trying to gain peer acceptance by giving in to peer pressures or modelling behaviour of older siblings and parents. Thirdly, there may be an inherent systemic problem as the cause. This may be related to differences between larger more dominant cultural groups and smaller minority groups, especially where there is a power differential. There may be inbuilt problems in roles within organisations where bullying is seen as the norm, such as in some of the armed forces.

Much research indicates that children from dysfunctional families are more likely to become bullies. Some bullies also come from hostile home environments where the parents are not interested or involved in their children's lives.

Effects of Bullying

Bullying has long-term negative impacts as well as short-term effects. It affects physical, psychological and social health and wellbeing. The severity of the impacts depends on the length of time for which the bullying occurred, the type of bullying, the mental health of the victim, the family environment and support network for the victim, and if the person belongs to a minority group which may lack community support. The physical symptoms that have been frequently reported include gastric disturbances in the form of stomach aches, nausea and loss of appetite. Problems with headaches, insomnia and tiredness are also common. The common psychological effects include withdrawal, moodiness, emotional changes and instability. Depression, anxiety and substance abuse has been associated with bullying. The risk of self-harming behaviours and suicide also exists. Absence from school increases, changes in academic performance occurs and these individuals often feel lonely, isolated and unsafe at school.

Bullying can also affect bystanders. If this occurs in a school or a sporting club environment, the witnesses may be nervous or fearful of returning. They may experience guilt if they stood by and did not assist and they too may suffer from anxiety or mood disorders.

There are also effects on the family members and friends of those people being bullied. They too may have physiological problems such as headaches and gastric upsets. They may also suffer from insomnia, anxiety and depression.

10 marks

*Note: Marks allocated will depend on the quality of the response as follows:
9–10 High; 7–8 Medium–High; 5–6 Medium; 3–4 Low–Medium; 1–2 Low; 0 Not shown.*

The question asks for an article to be written which suggests that most of it should be written in prose style. The inclusion of sub-headings is acceptable.

The use of dot points for the types of bullying would also be suitable.

The response shown here is more detailed than a student would be expected to write. This is so that teachers may advise their students of the range of information that could be included.