

PSYCHOLOGY

Unit 2 – Written examination



2021 Trial Examination

SOLUTIONS

SECTION A: Multiple-choice questions (1 mark each)

Question 1

Answer: B

Explanation: Sensation is a biological process that occurs in the same way for people, perception is unique as it depends on past experiences and motivation.

Question 2

Answer: B

Explanation: Light energy needs to be detected in order for reception to take place.

Question 3

Answer: A

Explanation: Interpretation is the last process in perception.

Question 4

Answer: A

Explanation: The iris is the muscle that expands and contracts to control the amount of light entering the eye, the pupil is an opening in the centre of the iris.

Question 5

Answer: B

Explanation: The lens flattens to focus on distant objects and bulges to focus on close objects.

Question 6

Answer: C

Explanation: Flavour involves a perception based on taste, smell, texture and visual cues.

Question 7

Answer: A

Explanation: The part of the cortex that processes information from taste buds is the gustatory cortex located in the parietal lobe.

Question 8

Answer: B

Explanation: The figures are spinning and changing the shape they cast on Eloise's retina. Her perception of the shapes maintaining their shape is due to shape constancy.

Question 9

Answer: D

Explanation: In order to see a sphere, the gaps between the spikes must be mentally closed to form a contour line.

Question 10

Answer: B

Explanation: Only option B provides two Gestalt principles.

Question 11

Answer: A

Explanation: Retinal disparity is a depth cue that relies on two slightly different images from each eye as a result of them being a few centimetres apart.

Question 12

Answer: A

Explanation: The Ames room only appears to be square when viewed through the peep hole using one eye, which means James is relying on monocular depth cues.

Question 13

Answer: A

Explanation: Babies having a preference for sweet tastes is a genetically inherited trait as it aids survival – breast milk is sweet, so it important that babies like the taste.

Question 14

Answer: A

Explanation: The carpentered world hypothesis is based on the belief that the illusion occurs due to misapplication of size constancy. The arrow head line is perceived as the outer edge of a building (closer to the observer) and the feather tail is perceived as being the inside corner of a room (further away). As the feather tail line is perceived as being further away yet each line casts an equal length image on the retina, we perceive the feather line as being longer.

Question 15

Answer: B

Explanation: Feature detectors coding a particular direction of movement fatigue and decrease their response over time when viewing a movement in one direction. When we look at a stationary object it appears to move in the opposite direction due to the relative activity of those neurons in comparison to the neurons responsible for detecting opposing activity.

Question 16

Answer: A

Explanation: Attitudes are relatively permanent and learned evaluations of attitude objects (an object, person, event or idea).

Question 17

Answer: C

Explanation: The message on the hat indicated the person was homosexual or Australian.

Question 18

Answer: B

Explanation: The two conditions of the experiment were whether the hat indicated the customer to be Australian or gay.

Question 19

Answer: D

Explanation: Measurements of both the time spent speaking to the customer and the confederate's positivity rating were recorded.

Question 20

Answer: B

Explanation: An IV was manipulated and a DV measured.

Question 21

Answer: C

Explanation: Participants were exposed to both conditions of the IV (high and low sugar diet).

Question 22

Answer: B

Explanation: Rachael has not been successful in her applications, but she has been invited for interviews and has maintained a positive attitude.

Question 23

Answer: A

Explanation: The discriminatory behaviour displayed by the children depended on the colour of the other children's eyes and what they had been told about the traits of children with that eye colour.

Question 24

Answer: C

Explanation: A self-fulfilling prophecy occurs when people behave in accordance to predictions about their behaviour. Children believed they would do worse when they were inferior as they had been told that the inferior group was slow.

Question 25

Answer: B

Explanation: Through first-hand experience working with Australians her perceptions and therefore prejudice has been changed.

Question 26

Answer: B

Explanation: The researchers manipulated the boys to encourage prejudice and then provided opportunities for them to work together to reduce prejudice.

Question 27

Answer: C

Explanation: In order to be a group, they must meet all four criteria of being two or more people interacting over a period of time, influencing each other and sharing a common purpose. Eliza and Bert do not meet all the criteria, as they are not interacting over a period of time.

Question 28

Answer: A

Explanation: Purniba's employer is rewarding her with payment for undertaking a desired activity.

Question 29

Answer: C

Explanation: Purniba has information power as she has more experience than Anjee about the requirements of the company.

Question 30

Answer: C

Explanation: A democratic style involves a team work approach which Purniba encourages by having colleagues work together.

Question 31

Answer: B

Explanation: Deindividuation itself does not reinforce a particular status although both prisoners and guards may have experienced a loss of individual identity.

Question 32

Answer: D

Explanation: The aim of the study was to investigate whether personality was the main cause of abusive behaviour by prison guards, therefore D is most correct.

Question 33

Answer: B

Explanation: The main concern was the trauma experienced by some participants.

Question 34

Answer: B

Explanation: Milgram was investigating the impact of authority on obedience. He used a university professor wearing a lab coat to be the authority figure giving instructions.

Question 35

Answer: A

Explanation: The result that was most relevant was the percentage of people who administered the highest level of shock.

Question 36

Answer: B

Explanation: Deception is acceptable and sometimes necessary in a study as long as it does not cause significant harm, which it did in this study.

Question 37

Answer: C

Explanation: Conformity increases in groups between 2 and four members but plateaus after that.

Question 38

Answer: A

Explanation: When all confederates were unanimous in their incorrect answer, the participant was most likely to conform.

Question 39

Answer: D

Explanation: Social loafing occurs when people rely on others in a group to complete work.

Question 40

Answer: A

Explanation: Helping behaviour is intended to benefit other people; as long as it was an action George thought would be helpful, it is irrelevant how Charlie felt about it or whose clothes they were.

Question 41

Answer: A

Explanation: Being in a good mood was most likely the reason, empathy is higher between like people, so given their age difference this is less likely the cause.

Question 42

Answer: C

Explanation: Being capable of lifting a person would make William more likely to physically assist the lady. Social responsibility is not a personal factor.

Question 43

Answer: A

Explanation: Jojo is most likely to help a friend because of an understanding that if she were in the same position she would help Van. Mood and empathy are not social norms.

Question 44

Answer: C

Explanation: Audience inhibition, as Chen doesn't know exactly what to do, he may be embarrassed to provide direct assistance.

Question 45

Answer: D

Explanation: People are most likely to help when there is no diffusion of responsibility.

SECTION B: Short-answer questions

Question 1 (2 marks)

One mark for each of the following points:

- Each taste bud contains between **50-150 taste receptor cells**
- Each taste bud can receive all tastes but is slightly **more sensitive to one of the five** primary tastes

Question 2 (3 marks)

The **retinal images** of the trees and equipment will be **small when they are far away** from him (1 mark) and the **retinal image** will become **larger as Matthew moves closer** to them (1 mark). However, due to size constancy, Matthew will **perceive the objects maintaining a constant size** rather than growing or shrinking (1 mark).

Question 3 (3 marks)

Figure ground is when a figure can be distinguished from the background by a **contour line** (1 mark). In this case, the fish's colour and **skin pattern was similar to the sea floor** which made it difficult to identify the contour line (1 mark) and so the fish was **camouflaged** (1 mark) and Arista did not see it.

Question 4 (4 marks)

Artists use height in the visual field to give the impression of depth by **changing the placement** of objects in the picture (1 mark), whereas relative size is used to create depth by **changing the size** of the objects in the picture. (1 mark)

Height in the visual field works by placing objects closer to the horizon line when they are meant to be perceived as further away and **further from the horizon line** when they are meant to be **perceived as closer** to the viewer. (1 mark)

Relative size works by **making objects larger** when they are meant to be **perceived as closer** and smaller when they are meant to be **perceived as further away** from the viewer. (1 mark)

Question 5 (4 marks)

By giving Leanne the same food twice but in different packaging, the marketing company is using a **repeated measures** design (1 mark). Packaging can have an impact on flavour, for example **bright coloured packaging may increase the perception of flavour** while white packaging may decrease the perception of flavour (1 mark). Leanne being aware of the brand may also influence her rating of the foods as people are **more likely to report known and familiar brands as tasting better** (1 mark). By collecting ratings from when the food is packaged with branding and without, the marketing company will have **data about the impact that the branding** has on the rating of flavour and adjust the packaging accordingly. (1 mark)

Question 6 (2 marks)

Synaesthesia is a cross modal experience where stimulation of one sense triggers an experience with a second sense. (1 mark). For example, a person may hear particular words and experience distinct tastes, alternatively they may see letters as numbers. There are various types of cross modal experiences. (1 mark)

Question 7 (3 marks)

Stereotypes are **collections of beliefs** we have about groups of people (1 mark) whereas prejudice is an unfavourable or **negative attitude** towards a group of people. (1 mark) When stereotypes contain negative information, we are more likely to have prejudice towards that group of people, in other words, **stereotypes can cause prejudice**. (1 mark)

Question 8 (4 marks)

The three components of an attitude are **Affect** (feeling), **Behaviour** and **Cognition** (thoughts) (1 mark)

A consistent attitude toward artwork may consist of positive feelings about art (**liking it**) (1 mark), buying artwork, visiting museums or owning art (behaviour) (1 mark) and beliefs about art that it is enriching to life, beautiful to look at. (1 mark)

Note: a consistent negative attitude is also acceptable

Question 9 (4 marks)

One factor Lawrence may use is mutual interdependence. (1 mark) By creating opportunities for staff to cooperate to serve customers better. (1 mark) Another factor Lawrence may use is equal status (1 mark)

He could apply this by ensuring staff are treated the same in terms of being given shifts (1 mark)

Note: could also apply social norms or sustained interactions

Question 10 (4 marks)

In **collectivist countries** such as Asia (1 mark) people are more likely to wear masks as they **value the needs of the group over individual** needs. (1 mark) In **individualist countries** such as America (1 mark) people more likely to protest as they **value individual needs over the group**. (1 mark)

Question 11 (3 marks)

- deciding that it is an emergency (1 mark)
- deciding to take responsibility (1 mark)
- deciding on a way to help (1 mark)

Note: the questions ask about decisions. While noticing the situation is the first stage of the model, noticing a situation is not a decision.

Question 12 (2 marks)

Diffusion of responsibility (1 mark) The witnesses all saw that other people were watching the attack on Kitty so felt that the **other witnesses had responsibility** to call for help (1 mark)

OR

Audience inhibition (1 mark) because there were so many witnesses, each of them may have felt **self-conscious about assisting** Kitty (1 mark)

Question 13 (1 mark)

General feelings cannot predict specific behaviour when the circumstances arise.

Question 14 (6 marks)

- a. That people who have been watching a scary movie are more likely to perceive an ambiguous stimulus as something threatening than those who have been watching a comedy movie.

1 mark for the population

1 mark for the IVs

1 mark for the DV (with appropriate direction)

- b. **Independent groups** (1 mark)

- c. **Participant differences** (1 mark) such as existing conditions such as anxiety or phobias (1 mark)