Psychology marking guide and response

External assessment 2024

Combination response (92 marks)

Assessment objectives

This assessment instrument is used to determine student achievement in the following objectives:

1. describe and explain localisation of function in the brain, visual perception, memory, learning, social psychology, interpersonal processes, attitudes and cross-cultural psychology
2. apply understanding of localisation of function in the brain, visual perception, memory, learning, social psychology, interpersonal processes, attitudes and cross-cultural psychology
3. analyse evidence about localisation of function in the brain, visual perception, memory, learning, social psychology, interpersonal processes, attitudes and cross-cultural psychology to identify trends, patterns, relationships, limitations or uncertainty
4. interpret evidence about localisation of function in the brain, visual perception, memory, learning, social psychology, interpersonal processes, attitudes and cross-cultural psychology to draw conclusions based on analysis.

Note: Objectives 5, 6 and 7 are not assessed in this instrument.

Purpose

This document consists of a marking guide and a sample response.

The marking guide:

- provides a tool for calibrating external assessment markers to ensure reliability of results
- indicates the correlation, for each question, between mark allocation and qualities at each level of the mark range
- informs schools and students about how marks are matched to qualities in student responses.

The sample response:

- demonstrates the qualities of a high-level response
- has been annotated using the marking guide.

Mark allocation

Where a response does not meet any of the descriptors for a question or a criterion, a mark of ‘0’ will be recorded.

Where no response to a question has been made, a mark of ‘N’ will be recorded.

Marking guide

Multiple choice

Question	Response
1	C
2	B
3	A
4	D
5	A
6	C
7	C
8	B
9	A
10	D
11	B
12	C
13	A
14	C
15	B
16	C or B[1]
17	A
18	D
19	B
20	B

[1] The multiple-choice scrutiny panel reviewed the question and determined that there were two keys for this item.

Paper 1: Short response

Q	Sample response	The response:
21	Learned fear is an example of classical conditioning in which a neutral stimulus is associated with an unconditioned stimulus that produces an innate fear response. This neutral stimulus then becomes a conditioned stimulus — for example, the white rat in the 'Little Albert' experiment. In that experiment, the unconditioned stimulus that elicited innate fear was the loud noise.	• describes learned fear in the context of classical conditioning **[1 mark]** • identifies the conditioned stimulus as the white rat **[1 mark]** • identifies the unconditioned stimulus as the loud noise **[1 mark]**
22	Division: sympathetic Description: The sympathetic nervous system regulates the body's response to emergencies. Division: parasympathetic Description: The parasympathetic nervous system activates processes that allow the body to save and store energy.	• identifies sympathetic nervous system **[1 mark]** • describes function of sympathetic nervous system **[1 mark]** • identifies parasympathetic nervous system **[1 mark]** • describes function of parasympathetic nervous system **[1 mark]**
23	Glutamate excites neurons, making them more likely to fire an action potential, whereas GABA has the opposite effect, inhibiting them and making them less likely to do so.	• contrasts the effect of glutamate and GABA on neurons **[1 mark]**
24	Evolutionary theories of attraction propose that people are attracted to potential mates who offer the best chances of successful reproduction. The findings from Buss et al. (1990) that support this theory are that males tend to prefer physically attractive mates and females tend to prefer ambitious mates with good earning capacity.	• describes evolutionary theories of attraction **[1 mark]** • identifies evidence of male preferences **[1 mark]** • identifies evidence of female preferences **[1 mark]**
25	In a spinal reflex, the spinal cord is the location of the synapse between sensory and motor neurons.	• describes the role of the spinal cord as the location of the synapse between sensory and motor neurons **[1 mark]**

Q	Sample response	The response:
26	The Stanford prison experiment concluded that roles or status affected the behaviours of the guards and prisoners. The guards took on stereotypical behaviours of prison guards, even if these were different to their normal behaviours, for example applying harsh discipline to prisoners. Likewise, the prisoners took on submissive behaviours consistent with their lower status in the study, for example complying with unreasonable demands made by the guards.	• infers a suitable variable affecting the behaviour of guards **[1 mark]** • provides an example of guard behaviour **[1 mark]** • infers a suitable variable affecting the behaviour of prisoners **[1 mark]** • provides an example of prisoner behaviour **[1 mark]**
27	Transduction in visual perception is the conversion by photoreceptors of light energy to electrochemical energy.	• describes the process of transduction in visual perception with reference to the function of photoreceptors **[1 mark]**
28a)	An example of stimulus generalisation is the pressing of various structures in a 'Skinner box', not just the lever.	• provides an example of stimulus generalisation in operant conditioning **[1 mark]**
28b)	In operant conditioning, negative reinforcement increases the frequency of the target behaviour by removing an unpleasant stimulus in response to the behaviour. An example is a shock turning off when a rat in a Skinner box presses a lever. Positive reinforcement increases the frequency of the target behaviour by providing a pleasant stimulus in response to the behaviour. An example is a food reward given to a rat when a lever is pressed. Punishments decrease the frequency of the target behaviour by introducing negative stimuli or by removing positive stimuli. An example is a rat receiving a shock when a lever is pressed, thereby reducing the frequency of lever pressing.	• explains use of – negative reinforcement **[1 mark]** – positive reinforcement **[1 mark]** – punishment **[1 mark]** • provides an example of – negative reinforcement **[1 mark]** – positive reinforcement **[1 mark]** – punishment **[1 mark]**

Q	Sample response	The response:
29	Social learning theory focuses on learning by observation. In the case of gender roles, the behaviour of same-gender models is observed and imitated. For example, primary socialisation takes place when children observe and imitate the behaviours of same-gender parents.	• explains the formation of gender roles through social learning **[1 mark]** • provides an example of primary socialisation **[1 mark]**
30	The hippocampus is involved in the initial consolidation of memories and the transfer of memories to other areas of the brain for storage.	• describes initial consolidation (formation) of memory **[1 mark]** • describes transfer to other brain structures for storage **[1 mark]**

Paper 2: Short response

Q	Sample response	The response:
1a)	The lowest response rate is 30%. This group had four bystanders.	• identifies the response rate of 30% **[1 mark]** • identifies four bystanders **[1 mark]**
1b)	The rate of response decreased with group size. For example, in the smallest group, 87% of participants responded, whereas in the largest group, only 30% responded. Response time increased as group size increased. For example, in the smallest group, responses occurred, on average, 56 seconds after the seizure commenced, while in the largest group, it took 170 seconds, on average, for participants to respond.	• identifies the trend in – rate of response **[1 mark]** – response time **[1 mark]** • provides evidence to support the trend in – rate of response **[1 mark]** – response time **[1 mark]**
1c)	The rate of response is likely to increase for all group sizes, because medical professionals are likely to have greater-than-average competence and confidence in assisting someone having an epileptic seizure.	• predicts a possible change in the data **[1 mark]** • provides a reason **[1 mark]**
2	For children who had learned to read, the words were relevant to their past experience and contributed to their perceptual set. This past experience provided a meaning that clashed with the meaning of the print colour of the word, thereby increasing their response time.	• explains the finding **[1 mark]** • uses the concept of perceptual set **[1 mark]**

Q	Sample response	The response:
3	In the illusion, the room appears to be rectangular in shape, but it is not. To maintain the illusion, binocular depth cues are avoided due to forced monocular vision. The two back corners are different distances from the viewer but appear to be at the same distance; thus, the person in one corner appears to be as distant as the person in the other corner, even though they are much closer and thus appear much larger.	• describes a relevant property of the room **[1 mark]** • describes an associated visual perception principle, such as absence of binocular depth cues **[1 mark]** • explains how this results in the illusion of two people of very different size **[1 mark]**
4a)	The levels of processing model predicts that if material to be learned is processed more deeply, it will be encoded more effectively.	• describes the levels of processing model of memory **[1 mark]**
4b)	The results of the investigation support the levels of processing model of memory. This is demonstrated by the proportion of words recognised increasing along with the level of processing, for example from 0.14 in the case condition to 0.45 in the rhyme condition.	• draws a conclusion **[1 mark]** • provides evidence to justify the conclusion **[1 mark]**
4c)	The improved recognition performance could be due simply to greater time spent with the material (i.e. longer response time) rather than greater depth of processing. The graph shows a strong positive relationship between response time and recognition performance, with recognition improving from 0.15 to 0.8 with a ~170ms increase in response time.	• infers an explanation other than level of processing that is consistent with the finding **[1 mark]** • supports response with data **[1 mark]**

Q	Sample response	The response:
5a)	The three components of the tri-component model of attitudes are the affective, cognitive and behavioural components.	• identifies the – affective component **[1 mark]** – cognitive component **[1 mark]** – behavioural component **[1 mark]**
5b)	The tri-component model would note that people feel more positively about attractive people (affective component); that they have more positive cognitions about attractive people, assigning them positive personal traits (cognitive component); and that they discriminate in favour of more attractive people, being more likely to help them (behavioural component).	• explains the findings in terms of the – affective component **[1 mark]** – cognitive component **[1 mark]** – behavioural component **[1 mark]**
5c)	Social comparison involves judging out-group members as inferior and in-group members as superior, to boost one's self-esteem. This would lead members of a group to find in-group members more attractive.	• describes social comparison **[1 mark]** • explains its effect **[1 mark]**
5d)	Personal prejudice, in this instance, is an unjustified negative opinion or feeling about those judged unattractive. For example, unattractive people might be considered unintelligent.	• describes personal prejudice **[1 mark]** • provides an example **[1 mark]**
6a)	Participants are less likely to retrieve encoded information in mismatched conditions due to lack of retrieval cues. In matched conditions, environmental cues that have been encoded as a part of the memory trace assist recall. In mismatched conditions, the cues are absent, and retrieval is less successful.	• describes retrieval failure with reference to the mismatched condition **[1 mark]** • describes use of cues for retrieval with reference to the two conditions **[1 mark]**
6b)	The method of loci is a strategy that uses easily visualised locations as cues when encoding, to support subsequent retrieval. These cues could compensate for the lack of cues due to mismatched conditions.	• describes the method of loci **[1 mark]** • explains how this method could reduce retrieval failure due to lack of context cues **[1 mark]**

Q	Sample response	The response:
6c)	Median = 6, Q3 = 7, Q1 = 6 IQR = Q3 − Q1 = 7 − 6 = 1	• calculates interquartile range **[1 mark]**
6d)	Confidence interval for the Mismatching mean: 6.27 ± 0.53, thus from 5.74 to 6.80. Confidence interval for the Matching mean: 7.73 ± 0.57, thus from 7.16 to 8.3. As the maximum value of the lesser mean (6.80) is still less than the minimum value of the greater mean (7.16), their intervals do not overlap. Therefore, we can conclude that context-dependent cues in the matched condition improve memory.	• uses confidence intervals to determine the maximum value of the lesser mean **[1 mark]** • uses confidence intervals to determine the minimum value of the greater mean **[1 mark]** • determines that the intervals do not overlap **[1 mark]** • concludes that context-dependent cues affect memory **[1 mark]**
7a)	Culture influences people's beliefs, customs and expectations. All of these can affect the way an individual behaves. For example, individuals in collectivist cultures might give up significant personal time to complete tasks that benefit their communities.	• explains how culture can influence behaviour **[1 mark]** • provides an example **[1 mark]**
7b)	The greatest level of culture shock was experienced at stage 2.	• identifies the stage at which adjustment was lowest **[1 mark]**
7c)	Sustained contact with local people could reduce prejudice. This could lead to a less sharp decline in psychological adjustment in stage 1. Mutual interdependence (such as obtaining employment) can reduce prejudice. This could lead to a lesser trough in stage 2 or a higher peak in stage 3.	• identifies − a way to reduce prejudice **[1 mark]** − a second way to reduce prejudice **[1 mark]** • predicts − the effect of the first way on the data **[1 mark]** − the effect of the second way on the data **[1 mark]**