



# **PSYCHOLOGY**

## **ATAR course examination 2020**

### **Marking key**

Marking keys are an explicit statement about what the examining panel expect of candidates when they respond to particular examination items. They help ensure a consistent interpretation of the criteria that guide the awarding of marks.

## Section One: Research methods

20% (36 Marks)

## Question 1

(19 marks)

- (a) Distinguish between scientific and non-scientific research in the table below. (6 marks)

Description			Marks
	Scientific	Non-scientific	
<b>Collection of evidence</b>	Based on verifiable evidence	Is based on tradition, experience or intuition	1–2
	or It is collected in a systematic way	or Not collected in a systematic way	
<b>Methodology</b>	Follows a descriptive set of instructions	Limited to no instructions	1–2
<b>Reliability</b>	Can be reproduced	Reproducibility is limited	1–2
<b>Total</b>			<b>6</b>
Accept other relevant responses			

- (b) (i) State the term used to identify the group that was given the capsule of water. (1 mark)

Description	Marks
Control/Control Group	1
<b>Total</b>	<b>1</b>

- (ii) Which person
- most**
- correctly understands statistical significance? Circle their name below. (1 mark)

Description	Marks
Dr Gwak	1
<b>Total</b>	<b>1</b>

- (iii) Describe how you would explain
- $p = .05$
- . (2 marks)

Description	Marks
It is the probability/chance that the results obtained are due to random factors/chance	1
.05 means that there is a 5% (5/100) chance your results are not due to the interaction of the variables	1
<b>Total</b>	<b>2</b>
Accept: <ul style="list-style-type: none"> <li>If you repeat the experiment 100 times, five times the result is not due to the actual variables</li> <li>95% chance (95/100) the results are due to the interaction of variables</li> <li>the research is not statistically significant.</li> </ul>	

- (c) (i) Define 'archival research'. (1 mark)

Description	Marks
When a researcher seeks out information and/or evidence from historical records	1
<b>Total</b>	<b>1</b>

- (ii) Outline **one** advantage and **one** disadvantage of archival research over other forms of non-experimental methods. (2 marks)

Description	Marks
Any one of the following	
Advantage: <ul style="list-style-type: none"> <li>• data has already been collected – save resources</li> <li>• do not need to go through as many ethics processes as data exists</li> <li>• rare behaviours/scenarios can be studied</li> <li>• shows changes over longer periods</li> <li>• reduces response bias as the researcher is not present when data was being collected</li> <li>• helps to investigate real-world scenarios, not just in a laboratory or experimental settings</li> <li>• can be used as a launchpad for future research.</li> </ul>	1
Any one of the following	
Disadvantage: <ul style="list-style-type: none"> <li>• data can be biased – e.g. letters to editors might be topical</li> <li>• participants not randomly selected</li> <li>• some archives get lost</li> <li>• errors in data input and difficult to check on ordinal data</li> <li>• information might be affected by definitions at the time (e.g. definition of family being married mother and father with children)</li> <li>• data collected by non-scientists</li> <li>• data usually correlational at best.</li> </ul>	1
<b>Total</b>	<b>2</b>

- (d) For each of the following scenarios, identify which is the **most** appropriate quantitative display method and justify your choice. (6 marks)

Description	Marks
Longitudinal data showing yearly changes in intelligence	
Method: Graph (line graph)	1
Justification: <ul style="list-style-type: none"> <li>• shows trends</li> <li>• shows large data set visually</li> <li>• easily comparable</li> <li>• reduces time required to analyse data</li> <li>• do not need statistical/mathematical knowledge to understand data</li> <li>• helpful to make predictions.</li> </ul> Accept other relevant responses	1
<b>Subtotal</b>	<b>2</b>
A series of medians and modes for a set of data	
Method: Table	1
Justification: <ul style="list-style-type: none"> <li>• easily comparable</li> <li>• easy to identify values or information</li> <li>• show multiple measures in the same table.</li> </ul> Accept other relevant responses	1
<b>Subtotal</b>	<b>2</b>
The proportions of attitudes of 100 surveyed people	
Method: Diagram (pie chart)	1
Justification: <ul style="list-style-type: none"> <li>• easy to compare categories</li> <li>• easy to analyse large amounts of data</li> <li>• easy to grasp/understand</li> <li>• simple to present.</li> </ul> Accept other relevant responses	1
<b>Subtotal</b>	<b>2</b>
<b>Total</b>	<b>6</b>

## Question 2

(17 marks)

- (a) State the sample and the population for the study. (2 marks)

Description	Marks
Sample: Western Australian drivers aged 18–35	1
Population: Western Australian drivers	1
<b>Total</b>	<b>2</b>

- (b) Outline **two** reasons why the mean score for a sample and its corresponding population may be different. (2 marks)

Description	Marks
The sample may not be representative of the population	1
Samples are only estimations of the population and are not expected to produce identical results even when they are representative	1
<b>Total</b>	<b>2</b>
Marker note: accept sampling issues for the first mark, not to be paired with representative of population.	

- (c) Define 'privacy' and 'confidentiality' as they relate to psychological research and outline the difference between the two terms. (3 marks)

Description	Marks
Defines privacy: Privacy refers to protecting participants from unwanted intrusion into their private lives by collecting only information relevant to the study	1
Defines confidentiality: <ul style="list-style-type: none"> <li>• confidentiality refers to safeguarding the information of participants collected in an experiment through how it is collected, stored and disseminated to others</li> </ul> or <ul style="list-style-type: none"> <li>• ensuring that the information collected in an experiment is not made available to anyone outside of the experiment without the participant's consent</li> </ul>	1
Outline the difference: Privacy relates to what information is collected, whereas confidentiality relates to how the information is dealt with.	1
<b>Total</b>	<b>3</b>

- (d) Outline **two** requirements of professional conduct in undertaking and publishing psychological research. (2 marks)

Description	Marks
One mark for each requirement	
<ul style="list-style-type: none"> <li>For copyright reasons this text cannot be reproduced in the online version of this document, but may be viewed at the link listed on the acknowledgements page.</li> <li>For copyright reasons this text cannot be reproduced in the online version of this document, but may be viewed at the link listed on the acknowledgements page.</li> <li>For copyright reasons this text cannot be reproduced in the online version of this document, but may be viewed at the link listed on the acknowledgements page.</li> <li>For copyright reasons this text cannot be reproduced in the online version of this document, but may be viewed at the link listed on the acknowledgements page.</li> </ul>	1-2
<b>Total</b>	<b>2</b>
Accept other relevant responses	

- (e) Define the term ‘deception’ as used in psychological research. (1 mark)

Description	Marks
Refers to concealing the true purpose of an experiment and the procedures used from participants of a research study	1
<b>Total</b>	<b>1</b>

- (f) State **two** requirements for the ethical use of deception in psychological research. (2 marks)

Description	Marks
Deception in research should not occur unless it is necessary (as knowledge of the true purpose of the experiment would be likely to influence participant behaviour)	1
Deception must be followed by debriefing (informing participants of the true purpose of the experiment and an explanation of the deception used)	1
<b>Total</b>	<b>2</b>

- (g) Describe how deception was used in Professor Em’s experiments. (2 marks)

Description	Marks
Describes both the deception involved and the true purpose or procedure: <ul style="list-style-type: none"> <li>allowed participants to believe that they were administering an electric shock to another participant, when in fact, there was no other participant, and no shock was being delivered</li> </ul> or <ul style="list-style-type: none"> <li>informed participants that they were undertaking a task related to memory where, in fact, he was studying obedience.</li> </ul>	1-2
<b>Total</b>	<b>2</b>
Accept other relevant responses	

- (h) (i) Applying today's ethical principles, identify the participant right that can also be argued to have been breached in the experiments conducted by Professor Em. (1 mark)

Description	Marks
Withdrawal rights	1
<b>Total</b>	<b>1</b>

- (ii) Define the right identified in part (h)(i) and outline how it was breached in Professor Em's experiments. (2 marks)

Description	Marks
Participants have the right to remove themselves and their data from an experiment at any time without negative consequences, pressure or coercion to continue.	1
When participants asked to stop the experiment, the experimental design included pressure from the experimenter to continue. or Statements such as 'the experiment requires you to continue' and 'it's absolutely essential that you continue' were utilised, thus putting pressure on participants not to withdraw.	1
<b>Total</b>	<b>2</b>

Section Two: Short answer

55% (95 Marks)

Question 3

(8 marks)

- (a) Define 'heredity'. (1 mark)

Description	Marks
The process of passing characteristics from one generation to another.	1
<b>Total</b>	<b>1</b>

- (b) Outline the difference between a hormone and a neurotransmitter. (2 marks)

Description	Marks
Any one of following:	
Hormones: <ul style="list-style-type: none"> <li>• travel the blood stream</li> <li>• slower</li> <li>• can target non-nerve cells.</li> </ul>	1
Any one of following:	
Neurotransmitters: <ul style="list-style-type: none"> <li>• found in the nervous system</li> <li>• almost instant</li> <li>• transmit messages between neurons.</li> </ul>	1
<b>Total</b>	<b>2</b>
Accept other relevant responses	

- (c) In the table below, give **one** specific example of how hormones (such as adrenaline or noradrenaline) can affect our behaviour, emotion and thought. (3 marks)

Description		Marks
Hormones effect		
<b>Behaviour</b>	<ul style="list-style-type: none"> <li>• noradrenaline promotes stress avoiding behaviours or</li> <li>• adrenaline enhances physical strength</li> </ul>	1
<b>Emotion</b>	<ul style="list-style-type: none"> <li>• excess noradrenaline or</li> <li>• adrenaline can lead to anxiety or depression, agitation</li> </ul>	1
<b>Thought</b>	<ul style="list-style-type: none"> <li>• hormonal imbalances can lead to many mental health issues such as depression or</li> <li>• noradrenaline affects attention and focus</li> </ul>	1
<b>Total</b>		<b>3</b>
Accept other relevant responses		

- (d) Describe the key difference between adrenaline and noradrenaline in terms of the brain's reaction to stress. (2 marks)

Description	Marks
Adrenaline makes the individual more fearful	1
Noradrenaline makes the individual more alert/more aroused	1
<b>Total</b>	<b>2</b>
Accept other relevant responses	



Question 4

(13 marks)

- (a) Name and define **three** conflict resolution solution types in the table below. (6 marks)

Description		Marks
Type of solution	Definition	
Distributive	Compromise and mutual concession	1–2
Integrative	Both sides benefit, understand both parties motives/needs and aim to meet both	1–2
Imposed	Stronger party or a third party will force/dictate a solution	1–2
<b>Total</b>		<b>6</b>

- (b) State and describe the **most** appropriate conflict resolution technique for Erick, Casey and their daughter. (3 marks)

Description	Marks
Counselling	1
One or both parties work with a counsellor (doesn't require both parties)	1
Develop skills to help deal with conflict	1
<b>Total</b>	<b>3</b>
Must state counselling as it is for resolving future disputes. Note: Accept other correct responses for description.	

- (c) Complete the table below by stating the name of the differing attachment styles and describe how the Type B and C child may behave when Alia presents them with Ainsworth's The Strange Situation. (4 marks)

Description			Marks
Child	Style name	Behaviour	
Ajax (Type A)	Anxious/insecure Avoidant	<ul style="list-style-type: none"> <li>ignores Alia, fails to look at her, does not seek her comfort/contact</li> </ul>	1
Barv (Type B)	Secure	<ul style="list-style-type: none"> <li>uses the mother as a secure base to explore from, settle quickly after the reunion</li> </ul>	1
Cleg (Type C)	Anxious/insecure Resistant	<ul style="list-style-type: none"> <li>resist mother by clinging to her but also kicking her away</li> </ul>	1–2
<b>Total</b>			<b>4</b>

## Question 5

(14 marks)

- (a) (i) Identify which theorist's work could be used to explain the communication issues between Mr and Mrs Muals. (1 mark)

Description	Marks
(Deborah) Tannen	1
<b>Total</b>	<b>1</b>

- (ii) According to the theorist named in part (a)(i), identify and explain the reasons why Mr and Mrs Muals are both feeling frustrated by the discussion. (5 marks)

Description	Marks
Identifies the gender difference	1
Identifies the two types – report and rapport	1–2
<b>Explanation</b>	
Explains the reason why they are both feeling frustrated	2
Outlines the reason	1
<b>Subtotal</b>	<b>2</b>
<b>Total</b>	<b>5</b>
Reasons could include:	
<ul style="list-style-type: none"> <li>• Men and woman communicate differently</li> <li>• Women tend to chat while men state facts</li> <li>• Women talk over one another while men talk in turn.</li> </ul>	
Accept other relevant responses. Note: Accept follow on marks as relevant	

- (b) (i) Name the language theorist whose work supports such programs. (1 mark)

Description	Marks
(Jerome) Bruner	1
<b>Total</b>	<b>1</b>

- (ii) Name and describe the learning system proposed by the theorist given in part (b)(i). (3 marks)

Description	Marks
Language Acquisition Support System	1
The support needed by parents (generally mothers)	1
Guide children's language (through interaction, routine, scaffolding, etc.)	1
<b>Total</b>	<b>3</b>
Note: Accept follow on marks as relevant.	

- (iii) Apart from routines, outline **one** other way in which pre-school teachers could enhance children’s language skills by using the work of the theorist named in part (a)(i). Use an example of an activity that could be used to support your answer. (4 marks)

Description	Marks
<p>Examples of correct responses include:</p> <p>Bruner:</p> <ul style="list-style-type: none"> <li>• Scaffolding (1) – operating one step ahead of where the child is (1) to encourage the child to reach that step before moving to the next (1). e.g. the child says ‘uh’ and points to a ball, educator says ‘buh’ until child also says ‘buh’ then educator moves to ‘ball’ (1)</li> </ul> <p>or</p> <ul style="list-style-type: none"> <li>• Joint attention (1) – eye contact is gained and then place an object between so that both are paying attention to the object (1), the object can then be named (1). e.g. educator could sit with child and number of objects, ensure both have attention on an object and then educator states what object is (1).</li> </ul> <p>Tannen:</p> <ul style="list-style-type: none"> <li>• Rapport (1) and report talk (1) – teachers can use activities that encourage boys to stand up in front of a group and present to the class (report) (1) compared to activities for girls that are encouraged to discuss in a group about their feelings (rapport) (1).</li> </ul>	<p>1–4</p>
<b>Total</b>	<b>4</b>
<p>Also accept reference. Formats are routines and so is not a correct response.</p>	
<p>Note: Accept follow on marks as relevant.</p>	

Question 6

(14 marks)

(a) Describe 'operant conditioning'.

(2 marks)

Description	Marks
Learning/behaviour modification through patterns of reinforcement or punishment	1
	1
<b>Total</b>	<b>2</b>

(b) Name **two** ways in which operant conditioning encouraged Jarra to continue with the behaviour. Explain and apply them to Jarra's learned behaviour.

(6 marks)

Description			Marks
	First way	Second way	
<b>Name</b>	<ul style="list-style-type: none"> <li>positive reinforcement</li> </ul>	<ul style="list-style-type: none"> <li>negative reinforcement</li> </ul>	1-2
<b>Explanation</b>	<ul style="list-style-type: none"> <li>adding a reward for when correct behaviours are shown</li> </ul>	<ul style="list-style-type: none"> <li>removing something undesirable as a reward for correct behaviours</li> </ul>	1-2
<b>Application to Jarra</b>	<ul style="list-style-type: none"> <li>Jarra gets a lolly whenever she collects the rubbish</li> </ul>	<ul style="list-style-type: none"> <li>Jarra has learned she doesn't step in rubbish when she collects it</li> </ul>	1-2
<b>Total</b>			<b>6</b>
Note: Does not matter which 'way' is listed as first or second. Accept other correct examples for application			

(c) Name the theory or process of learning that Jarra is discussing.

(1 mark)

Description	Marks
Observational learning	1
<b>Total</b>	<b>1</b>
Note: Accept Social learning theory and Social cognitive theory.	

(d) Complete the table below by using your knowledge of classical conditioning.

(5 marks)

Description	Marks
Neutral stimulus – goldfish	1
Unconditioned stimulus – allergic reaction	1
Unconditioned response – fear	1
Conditioned stimulus – goldfish	1
Conditioned response – fear	1
<b>Total</b>	<b>5</b>

Question 7

(21 marks)

- (a) Identify the key belief underlying the trait theory regarding the origin of an individual's personality. (1 mark)

Description	Marks
Personality is innate/biologically based	1
<b>Total</b>	<b>1</b>

- (b) Use an example to explain what is meant by the term 'continuum' in McCrae and Costa's approach to personality. (2 marks)

Description	Marks
<b>Definition</b>	
To the strength of a certain trait that an individual may present A hypothetical line from low to high used to measure the amount of a trait that an individual may display	1
<b>Example</b>	
The trait of extraversion ranges from low (introverted) to high (extroverted) Any other relevant example	1
<b>Total</b>	<b>2</b>
Accept other relevant examples	

- (c) Identify and describe each of these **three** factors. (6 marks)

Description		Marks
<b>Factor</b>	<b>Description</b>	
Genuineness	Caregivers must be open and honest with children.	2
Acceptance/ Unconditional positive regard	Caregivers must offer us unconditional positive regard/acceptance. They demonstrate love for us as who we are and not require us to change to be accepted.	2
Empathy	Caregivers must demonstrate that they can understand our feelings and see the world from our perspective.	2
<b>Total</b>		<b>6</b>
Marker Note: Candidates need to demonstrate an understanding that the factor is provided to the individual from important people (general caregivers).		

- (d) Define what Rogers meant by the term 'congruence' and state how this influences personality. (2 marks)

Description	Marks
Defines the term congruence: <ul style="list-style-type: none"> <li>congruence refers to a high level of consistency between our self-image and our ideal self</li> <li>where the way that we see ourselves and the person we wish to be are closely aligned.</li> </ul>	1
How this influences personality: <ul style="list-style-type: none"> <li>a higher level of congruence leads to a well-adjusted personality and the potential for self-actualisation.</li> </ul>	1
<b>Total</b>	<b>2</b>
Accept other relevant answers	

**Question 7** (continued)

- (e) From a humanistic perspective, outline **four** characteristics of a person who has reached self-actualisation. (4 marks)

Description	Marks
One mark for any four characteristics:	
<ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> </ul> <div style="border: 1px dashed gray; padding: 10px; margin: 10px 0;"> <p style="text-align: center; color: gray;">For copyright reasons this text cannot be reproduced in the online version of this document.</p> </div> <div style="border: 1px dashed gray; padding: 10px; margin: 10px 0;"> <p style="text-align: center; color: gray;">For copyright reasons this text cannot be reproduced in the online version of this document.</p> </div>	1–4
<b>Total</b>	
<b>4</b>	

- (f) (i) Using the above scenario, identify the level of Maslow’s Hierarchy of Needs that Jane had met before and after she moved to the new house. (4 marks)

	Level	Scenario example
<b>Before</b>	Esteem needs	<ul style="list-style-type: none"> <li>• Jane had achieved recognition through her art or</li> <li>• Jane was proud of her accomplishments</li> </ul>
<b>After</b>	Physiological needs	<ul style="list-style-type: none"> <li>• Jane was unable to eat at times or</li> <li>• Jane was willing to put her safety at risk to eat</li> </ul>

- (ii) With reference to the scenario, explain why Jane, who was previously cautious person, may begin to engage in dangerous activities such as jumping a fence. (2 marks)

Description	Marks
When a person is failing to meet their physiological needs they may disregard higher level needs such as safety needs in order to fill their basic needs	1
Jane is struggling to meet her physiological need of food and so she sacrifices her safety engaging in dangerous activities in order to meet it	1
<b>Total</b>	
<b>2</b>	

Question 8

(15 marks)

- (a) Identify the **two** psychological processes being investigated in this study. (2 marks)

Description	Marks
Social facilitation	1
Social inhibition	1
<b>Total</b>	<b>2</b>
The answer can be on either line. Do not accept facilitation or inhibition.	

- (b) Use the data from the table above to explain why the participants in Group A performed better when they thought a person was present in the easy condition and worse in the difficult condition. (4 marks)

Description	Marks
<b>Easy</b>	
Believing there was a person present, the participants scored (2 points) higher than when they thought there is no person present	1
This is due to social facilitation Accept: increase in competitive instinct, co-action effect, audience effect	1
<b>Subtotal</b>	<b>2</b>
<b>Difficult</b>	
Believing there is no person present, the participants scored (1.69) higher than when they believe there is a person present	1
This is due to social inhibition Accept: evaluation apprehension/distraction conflict	1
<b>Subtotal</b>	<b>2</b>
<b>Total</b>	<b>4</b>

- (c) Define the term 'attribution'. (1 mark)

Description	Marks
The process of assigning a cause to our own behaviour, and that of others	1
<b>Total</b>	<b>1</b>

- (d) Name the theorist who developed a co-variation model of attribution theory. (1 mark)

Description	Marks
(Harold) Kelley	1
<b>Total</b>	<b>1</b>

**Question 8** (continued)

- (e) Using the co-variation model, outline how Zulema would have come to this attribution. (6 marks)

Description	Marks
Low consensus Only Zulema would have done better, not the other people	1–2
Low distinctiveness She does better when people watch her in all types of tasks	1–2
High consistency She has always done better when other people watch her	1–2
<b>Total</b>	<b>6</b>
The entity, person, time model does not work. She would come up with an entity attribution using the low consensus, low distinctiveness, high consistency.	

- (f) A theorist developed their social psychology theory by investigating cognitive consistency as a participant-observer of a cult that believed a flood was coming to destroy the world. Name this theorist. (1 mark)

Description	Marks
(Leon) Festinger	1
<b>Total</b>	<b>1</b>



## Question 9

(10 marks)

- (a) Define the terms 'post-traumatic growth' and 'post-traumatic stress disorder'. (2 marks)

Description	Marks
PTG – experience of individuals whose development, at least in some areas has surpassed what was present before the struggle with crises occurred	1
PTSD – failure to recover after experiencing or witnessing a terrifying event	1
<b>Total</b>	<b>2</b>
Accept other relevant responses	

- (b) It could be suggested that Padima lacks resilience. Outline
- three**
- qualities that someone with resilience would demonstrate. (3 marks)

Description	Marks
One mark for any three examples qualities:	
<ul style="list-style-type: none"> <li>• see change as a challenge rather than something to be feared</li> <li>• have a feeling of control over their own lives</li> <li>• have a sense of direction in both their professional and personal lives</li> <li>• demonstrate a wide comfort zone</li> <li>• have a strong support network</li> <li>• have a strong faith in a system of meaning</li> <li>• are able to make the most out of small opportunities.</li> </ul>	1–3
<b>Total</b>	<b>3</b>
Accept other relevant responses	

- (c) Describe the difference between someone who shows resilience and someone who shows post-traumatic growth after a significant event. (2 marks)

Description	Marks
People who are resilient are able to go back to functioning 'as normal' following a significant event	1
People who experience PTG go 'beyond' their pre-traumatic levels of understanding and adaptability	1
<b>Total</b>	<b>1</b>
Accept other relevant responses	

- (d) Explain why post-traumatic growth is not always about only positive reactions only. (3 marks)

Description	Marks
Post-traumatic growth is about how an individual manages and overcomes the trauma	1
It does not mean that the trauma does not impact them negatively	1
People have varying reactions which can be a mix of positive or negative	1
<b>Total</b>	<b>3</b>
Accept other relevant responses	
Note: Accept answers that demonstrate an understanding that PTG is not purely about a person being positive following an event, but who deals with and overcomes adversity to a greater level than before the trauma.	

## Section Three: Extended answer

25% (52 Marks)

## Question 10

(26 marks)

The Soaring Bellanita is a famous circus performer who, in a recent rehearsal, fell from the highwire. After the accident, when Bellanita tried to speak, she became frustrated: the words that came out were not fluent, she repeated many words, and speech made no sense. She found it difficult to walk and struggled to stop any movement when asked. Her friends took Bellanita to the hospital, where the doctors ordered a series of tests that included a psychological memory test, a physical examination and brain scans.

The results from the memory tests showed that Bellanita was able to attend to visual stimuli but had difficulty with sound tasks. The psychologist found that she struggled with the process of transferring the information to her long-term memory stores and required lots of repetition with meaning to assist her in this process.

The first brain scan showed damage to the left side of the brain. A more precise scan showed additional damage to an area of the brain that produces a neurotransmitter that is responsible for reward, motivation and movement.

Use your knowledge of the brain, the process of neural transmission and the role of neurotransmitters, and memory, to analyse the scenario and synthesise an explanation for the Soaring Bellanita's symptoms.

In your answer, refer to the above scenario by creating a well-constructed response, addressing the following:

- identify the area of the brain and lobe that caused the speech issues when damaged (2 marks)
- explain why these speech issues may have occurred, using examples from the scenario (3 marks)
- identify and explain each component of Atkinson and Shiffrin's (1968) multi-store model of memory (9 marks)
- explain Bellanita's memory processing issues (2 marks)
- identify the neurotransmitter that has been affected (1 mark)
- describe the process of neural transmission from one neuron to another. (5 marks)
- quality of your response. (4 marks)

Description	Marks
<b>Identify the area and its location</b>	
• Broca's area	1
• Frontal lobe	1
<b>Subtotal</b>	<b>2</b>
<b>Explain why speech issues have occurred</b>	
• Broca's area is responsible for the expressive/motor aspects of language	1
Two marks for the damage to the area. Examples include:	
<ul style="list-style-type: none"> <li>• not being able to produce the words</li> <li>• even though she could understand what people were saying</li> <li>• she could not produce the motor instructions for the formation of words/speech</li> <li>• stuttering/speech is not fluid</li> <li>• words might not be pronounced correctly</li> <li>• Broca's/expressive/non-fluent Aphasia.</li> </ul>	1-2
<b>Subtotal</b>	<b>3</b>
<b>Multi-store model of memory</b>	
• Sensory Register	1
Any two points:	
<ul style="list-style-type: none"> <li>• we attend/pay attention to the stimuli</li> <li>• capacity: 3-7 units</li> <li>• encoding: any senses</li> <li>• but most research has been on visual and auditory</li> <li>• iconic memory – momentary memory for visual stimuli</li> <li>• echoic memory – momentary memory of auditory stimuli</li> <li>• duration: 0.25 to 0.5 seconds.</li> </ul>	1-2
• Short-term memory/store	1
Any two points:	
<ul style="list-style-type: none"> <li>• without processing, we will forget the information from the sensory register</li> <li>• rehearsal is repeating the information to store it longer</li> <li>• maintenance rehearsal is deliberately repeating information to keep it in the short-term memory</li> <li>• elaborative rehearsal is thinking/adding meaning to the information when deliberately rehearsing/repeating</li> <li>• information is then encoded and transferred to the long-term memory</li> <li>• capacity: 5-9 chunks</li> <li>• encoding: mostly auditory</li> <li>• duration: 0-18 seconds or 0-30</li> <li>• depends on active rehearsal</li> <li>• depends on modality.</li> </ul>	1-2
• Long-term memory/store	1
Any two points:	
<ul style="list-style-type: none"> <li>• has long-term representations of information</li> <li>• can be retrieved from memory</li> <li>• capacity: unlimited</li> <li>• encoding: mostly semantic</li> <li>• but can be auditory or visual</li> <li>• duration: unlimited.</li> </ul>	1-2
<b>Subtotal</b>	<b>9</b>

<b>Explanation of memory processing issues</b>	
Any two points: <ul style="list-style-type: none"> <li>• Bellanita has damage to the area of the brain that is responsible for processing sound/auditory information</li> <li>• she could attend to visual information as that section has not been damaged</li> <li>• to help her transfer from short-term to long-term memory, she needed to do more elaborative rehearsal.</li> </ul>	1–2
<b>Subtotal</b>	<b>2</b>
<b>Neurotransmitter and neurotransmission from one neuron to another</b>	
<ul style="list-style-type: none"> <li>• Dopamine</li> </ul>	1
<b>Subtotal</b>	<b>1</b>
<b>Neurotransmitter</b>	
Any five points that flow coherently: <ul style="list-style-type: none"> <li>• synapse is where two or more neurons join</li> <li>• action potential/electrical charge travels down the axon to axon terminal/synaptic knob of the pre-synaptic neuron</li> <li>• causes calcium ions to enter into the terminal/knob</li> <li>• this causes the vesicle containing the neurotransmitter to move to the pre-synaptic membrane and release the neurotransmitter into the synaptic cleft</li> <li>• the neurotransmitter diffuses/travels across the synaptic cleft</li> <li>• the neurotransmitter attaches to receptors on the postsynaptic membrane</li> <li>• this initiates the post-synaptic neuron</li> <li>• which causes sodium and potassium ions to move across the membrane,</li> <li>• generating another actional potential.</li> </ul>	1–5
<b>Subtotal</b>	<b>5</b>
<b>Quality of response</b>	
Candidate writes coherent and logically ordered paragraphs. Appropriate psychological terminology used consistently, extensively and correctly. Punctuation/grammar consistently correct. (Does not need essay style broad introduction or conclusion for full marks)	4
Candidate writes coherent and logically ordered paragraphs. Uses a range of psychological terminology that is mostly correct. There may be some errors in punctuation/grammar evident, but these do not impede meaning.	3
Candidate writes using clear paragraphs. Uses simple psychological terminology. There may be some errors in punctuation/grammar evident, but these do not impede meaning.	2
Candidate writes a response that attempts to use paragraphs, uses limited psychological terminology correctly and/or may have limited correct use of punctuation and grammar.	1
Note: The use of appropriate well-labelled diagrams/drawings are acceptable for this criterion, but needs to be accompanied with an explanation	
<b>Subtotal</b>	<b>4</b>
<b>Total</b>	<b>26</b>

## Question 11

(26 marks)

When Shauna was five-years-old she witnessed her older sister Lola steal a toy animal from the supermarket. She then gave it to her mother as a gift. Not knowing it was stolen, her mother gave Lola a cookie. As her mother gave her sister praise, Shauna thought if she did what her mother wanted her to do, she too would get a reward. Shauna's mother's favourite animal was a meerkat. When they went to the zoo the day before Shauna's sixth birthday, Shauna took a meerkat from the enclosure and hid it in her backpack. When they got home, she proudly gave it to her mother, who was very upset with her and called the police.

Once the meerkat was returned, the police interviewed Shauna to try to understand why she had committed the crime. Shauna explained that she stole the meerkat because she thought it was the right thing to do as her sister got a cookie as a reward after stealing a toy animal and giving it to her mother. The police explained what she had done was particularly bad because it was a live animal, but Shauna kept arguing that her sister had stolen a toy animal, seeming to believe that the stolen toy could think and feel too. She also told the police that she was not worried about getting caught, as no one could have seen her because her eyes were closed.

Following the incident, Shauna never stole again; however, she also became withdrawn. She became unwilling to try anything new, stating that she would not be any good at it and that she was not good at anything.

In your answer, refer to the above scenario by creating a well-constructed response, addressing the following:

- identify the stage of cognitive and moral development displayed by Shauna in the scenario (2 marks)
- outline and apply Piaget's theory of cognitive development **or** Kohlberg's theory of moral development (5 marks)
- explain how your chosen theory (Piaget or Kohlberg) accounts for an aspect of Shauna's behaviour in the scenario, referring to empirical evidence (5 marks)
- outline Erikson's stage theory of identity **or** Bandura's social learning theory (5 marks)
- explain how your chosen theory (Erikson or Bandura) accounts for an aspect of Shauna's behaviour in the scenario, referring to empirical evidence (5 marks)
- quality of your response. (4 marks)

Description	Marks
<b>Cognitive and moral development</b>	
Identifies the stages of cognitive and moral development displayed	1
Cognitive development: Pre-operational stage	1
Moral Development: (Stage 2) Self-Interest or Gain Concrete Rewards or Individualism and Exchange	1
<b>Subtotal</b>	<b>2</b>
<b>Theory</b>	
<p>Outlines chosen theory:</p> <p>Piaget's theory of cognitive development:</p> <p>One mark for each of the following – maximum of 5 marks:</p> <ul style="list-style-type: none"> <li>• individuals move through four stages in order</li> <li>• the sensorimotor stage, where individuals learn about the world through the use of their senses, lack object permanence</li> <li>• the pre-operational stage where children are not yet able to engage in logical thought, they are egocentric and unable to engage in conservation</li> <li>• the concrete operational stage, where children can use logic to solve problems, develop an understanding of conservation</li> <li>• the formal operational stage where children can engage in hypothetical problem solving and use abstract concepts.</li> </ul> <p>or</p> <p>Kohlberg's theory of moral development:</p> <p>One mark for each of the following – maximum of 5 marks:</p> <ul style="list-style-type: none"> <li>• individuals may pass through three levels of moral reasoning that include a total of six stages</li> <li>• most people never reach stage five or six (level three / most only reach stage four)</li> <li>• moral development is determined not by a person's actions but by the rationale that they use to justify their choice of action</li> <li>• level one is pre-conventional reasoning with stage one focussing on avoiding punishment and stage two on gaining a reward</li> <li>• level two is conventional reasoning, with stage three focussing on being seen as good or nice by others and stage four focussing on doing what is right under the law</li> <li>• level three is post-conventional reasoning, with stage five focusing on maintaining social contracts and stage six focusing on universal ethics and justice.</li> </ul> <p>Note: Where names of stages are stated but not elaborated one mark may be given.</p>	1–5
<b>Subtotal</b>	<b>5</b>
<b>Explanation</b>	
<p>Clear explanation of the chosen theory to the scenario.</p> <p>Cognitive development, any two of:</p> <ul style="list-style-type: none"> <li>• at age 5, Shauna falls in the pre-operational stage of cognitive development</li> <li>• Shauna is displaying egocentrism and demonstrating an inability to see what others do. When Shauna cannot see by closing her eyes, she believes that others cannot see her.</li> <li>• Shauna shows evidence of 'animism' a characteristic of children in the preoperational stage as she believes that soft toys are real.</li> </ul> <p>Moral development:</p> <ul style="list-style-type: none"> <li>• Shauna is demonstrating that she is at Level 1, Stage 2, Self-Interest or Gain Concrete Rewards or Individualism and Exchange – expectation of cookie reward.</li> </ul>	1–2

Application of empirical evidence: Explains a relevant supporting study/studies/theorists and makes explicit links to how this supports the theory.	1–3
Describes a relevant supporting study with links to the scenario	
Outlines a relevant supporting study	
Accept relevant empirical evidence	
<b>Subtotal</b>	<b>5</b>
<b>Identity and social-learning theory</b>	
<p>Outlines chosen theory.</p> <p>Identity theory (any five of):</p> <ul style="list-style-type: none"> <li>• Erikson’s stage theory of identity sees individuals moving through eight stages of identity development across the lifespan, through which individuals develop their sense of self</li> <li>• each of the eight stages is named correctly and in the correct order (if listed as an order)</li> <li>• at each stage, an individual is confronted with a different psychosocial crisis as a result of the individual’s psychological needs being in conflict with the demands of society</li> <li>• a positive resolution of crises leads to the development of virtues and healthy personality development</li> <li>• failures to effectively resolve a crisis results in the individual becoming stuck, leading to abnormal personality development</li> <li>• failures to effectively resolve a crisis results in a reduced capacity to resolve crises at later stages.</li> </ul> <p>or</p> <p>Social-learning theory (any five of):</p> <ul style="list-style-type: none"> <li>• social learning theory theorises that an individuals’ behaviour’s and actions develop over time as a result of interaction with their environment</li> <li>• social learning theory sees our behaviour’s and our personality as something that continually develops over the course of the life-span</li> <li>• through observation of behaviour’s, individuals acquire knowledge about behaviour’s and their likely outcomes</li> <li>• models are those who the individuals are likely to attend to, usually those seen to be of high status or similar to the individual</li> <li>• the likelihood of behaviour change through observing a model is dependent upon the individual attending to the behaviour (attention), being able to recall it (retention), having the physical or mental capacity to reproduce it (reproduction) and being motivated to carry out such a behaviour (motivation)</li> <li>• motivation through vicarious reinforcement increases the likelihood of a behaviour being reproduced</li> <li>• a reciprocal relationship of bidirectional influence exists between an individual and the environment, whereby the individual is influenced by the environment and also exerts influence over the environment.</li> </ul> <p>Note: Reference to cognitive components and self-efficacy should not be awarded marks as these form components of his later social cognitive theory.</p>	1–5
<b>Subtotal</b>	

Explanation	
<p>Clear explanation of the chosen theory to the scenario.</p> <p>Erikson's stage theory of identity, two of:</p> <ul style="list-style-type: none"> <li>at age six, Shauna is in the early childhood stage, where she is trying to resolve the crisis of initiative versus guilt</li> <li>Shauna was attempting to demonstrate initiative by taking the meerkat, her mother's reaction led her to feel a strong sense of guilt for taking the initiative, failing to overcome the crisis has resulted in Shauna being unwilling to try new things and failures in the next stage of initiative versus shame and doubt</li> <li>Shauna becoming withdrawn is a result of the negative consequence of inhibition from failure at this stage.</li> </ul> <p>or</p> <p>Bandura's social learning theory:</p> <ul style="list-style-type: none"> <li>Shauna witnessed her sister stealing and being rewarded for the behaviour, as her sister was a powerful model for her, so she attended to the behaviour</li> <li>when Shauna was presented with the opportunity to steal, she replicated the behaviour that she had observed.</li> </ul>	1-2
<p>Application of empirical evidence: Explains a relevant supporting study/studies/theorists and makes explicit links to how this supports the theory</p>	1-3
Describes a relevant supporting study with links to scenario	
Outlines a relevant supporting study	
Accept relevant empirical evidence	
<b>Subtotal</b>	<b>5</b>
Quality of response	
<p>Candidate writes coherent and logically ordered paragraphs. Appropriate psychological terminology used consistently, extensively and correctly. Punctuation/grammar consistently correct. (Does not need essay style broad introduction or conclusion for full marks.)</p>	4
<p>Candidate writes coherent and logically ordered paragraphs. Uses a range of psychological terminology that is mostly correct. There may be some errors in punctuation/grammar evident, but these do not impede meaning</p>	3
<p>Candidate writes using clear paragraphs. Uses simple psychological terminology. There may be some errors in punctuation/grammar evident, but these do not impede meaning</p>	2
<p>Candidate writes a response that attempts to use paragraphs, uses limited psychological terminology correctly and/or may have limited correct use of punctuation and grammar</p>	1
<p>Note: The use of appropriate well-labelled diagrams/drawings are acceptable for this criterion, but needs to be accompanied with an explanation</p>	
<b>Subtotal</b>	<b>4</b>
<b>Total</b>	<b>26</b>



## ACKNOWLEDGEMENTS

- Question 2(d)** Dot points adapted from: Australian Psychological Society. (2007). *APS code of ethics*. Australian Psychological Society, p. 25. Retrieved August, 2020, from <https://www.psychology.org.au/getmedia/d873e0db-7490-46de-bb57-c31bb1553025/18APS-Code-of-Ethics.pdf>
- Question 3(b)** Definition from: McCaghy, C. H., Capron, T. A., Jamieson, J. D., et al. (2016). *Deviant behavior: Crime, conflict, and interest groups* (8th ed.). Routledge, p. 22.
- Question 7(e)** Dot points 1–15 adapted from: Maslow, A. H. (1954). *Motivation and personality*. Harper & Brothers, pp. 153–174.  
Dot points 16–20 adapted from: Rogers, C. R. (1961). *On becoming a person: A therapist's view of psychotherapy*. Houghton Mifflin, pp. 187–194.
- Question 8(c)** Definition from: Vaughan, G, M., & Hogg, M. A. (2017). *Social psychology* (8th ed.). Pearson, p. 82.
- Question 9(a)** Definition of PTG from: Tedeschi, R. G., & Calhoun, L. G. (2004). Posttraumatic growth: Conceptual foundations and empirical evidence. *Psychological Inquiry*, 15 (1), pp. 1–18. Retrieved August, 2020, from <https://trauma-recovery.ca/resiliency/post-traumatic-growth/>  
Definition of PTSD adapted from: Mayo Clinic. (2018). *Post-traumatic stress disorder (PTSD)*. Retrieved August, 2020, from <https://www.mayoclinic.org/diseases-conditions/post-traumatic-stress-disorder/symptoms-causes/syc-20355967?>

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