



# **PSYCHOLOGY**

## **ATAR course examination 2024**

### **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: Short answer

70% (136 Marks)

## Question 1

(20 marks)

- (a) Distinguish between the terms 'sensation' and 'perception'. (2 marks)

Description	Marks
sensation refers to the (physical) detection of (raw) sensory information (from the environment)	1
perception involves the (psychological) interpretation/understanding of the information	1
<b>Total</b>	<b>2</b>

- (b) Name and outline
- three**
- processes of sensation. (6 marks)

Description	Marks
reception	1
the sensory organs detect the stimulus	1
transduction	1
the sensory organs convert the stimulus into neural signals	1
transmission	1
neural signals are relayed to the brain	1
<b>Total</b>	<b>6</b>
Accept other relevant answers.	

- (c) With reference to Figure 1, explain how the processes of organisation and interpretation impact our perception of the image. (4 marks)

Description	Marks
organisation groups features of the image together	1
in Figure 1, the break between the top and bottom half of the image is likely to be ignored, organising it together as one whole image, helping us to perceive the horse/seal	1
interpretation involves the brain giving meaning to the whole image	1
our knowledge and experience can impact this; if we spend a lot of time around horses, then we may be more likely to interpret the image as a horse	1
<b>Total</b>	<b>4</b>
Accept other relevant answers.	

- (d) Provide a psychological definition for the term 'divided attention'. (3 marks)

Description	Marks
focusing on	1
two or more stimuli	1
at the same time	1
<b>Total</b>	<b>3</b>

- (e) Name the researcher and state the year in which this study was conducted. (2 marks)

Description	Marks
(Colin) Cherry	1
1953	1
<b>Total</b>	<b>2</b>

- (f) Explain how the Cocktail party effect findings relate to selective attention. (3 marks)

Description	Marks
when we hear two or more messages at the same time	1
we are not able to recall all/process all of the auditory information	1
instead we selectively attend to (distinct) pieces of information that catch our attention	1
<b>Total</b>	<b>3</b>

## Question 2

(21 marks)

- (a) Define the psychological term 'memory'. (1 mark)

Description	Marks
Any one of	
<ul style="list-style-type: none"> <li>specific information or a specific past experience that is recalled</li> <li>(the ability to retain information or a representation of past experience based on the) mental processes of learning or encoding, retention (across some interval of time), and retrieval/reactivation of the memory</li> <li>the hypothesised part of the brain where traces of information and past experiences are stored</li> </ul>	1
<b>Total</b>	<b>1</b>

- (b) Name structures A and B in the table below. (2 marks)

Description	Marks
A: hippocampus	1
B: cerebellum	1
<b>Total</b>	<b>2</b>

- (c) State **three** roles of the amygdala. (3 marks)

Description	Marks
plays a key role in the emotional component of memories	1
formation of fear responses	1
attaches emotional significance to memories	1
<b>Total</b>	<b>3</b>
Accept other relevant answers.	

- (d) Explain the amygdala's potential role in the process of classical conditioning. (5 marks)

Description	Marks
the amygdala evaluates stimuli and	1
recognises a threatening stimulus	1
a fear response	1
can trigger a reflexive/unconditioned response	1
to an unconditioned stimulus	1
<b>Total</b>	<b>5</b>
Accept other relevant answers.	

- (e) Outline **two** possible changes in a person's ability to form memories resulting from damage to the amygdala. (2 marks)

Description	Marks
Any two of	
<ul style="list-style-type: none"> <li>episodic memories are inaccurately formed</li> <li>memories are inaccurately formed as being fearful</li> <li>incorrectly attributes inappropriate memories to past experience</li> <li>difficulties in forming emotional memories</li> </ul>	1–2
<b>Total</b>	<b>2</b>
Accept other relevant answers.	

- (f) Name and outline **two** other conditions associated with memory loss. Identify **two** main features of each. (8 marks)

Description	Marks
Alzheimer's disease	1
a degenerative disease	1
Features – any two of	
<ul style="list-style-type: none"> <li>early-stage patients tend to have difficulty with recall and encoding in short-term memory</li> <li>later stage patients have difficulty with most parts of memory</li> <li>patients can be confused about time and place</li> <li>patient's capacity for concentration declines</li> <li>patients can be frustrated, moody and have changes to personality</li> </ul>	1–2
<b>Subtotal</b>	<b>4</b>
Wernicke-Korsakoff Syndrome (WKS)	1
drug-induced	1
Features – any two of	
<ul style="list-style-type: none"> <li>associated with a thiamine deficiency</li> <li>diagnostic criteria include (anterograde) amnesia</li> <li>patients may also have retrograde amnesia</li> <li>patients may: <ul style="list-style-type: none"> <li>be confused</li> <li>have eye movement disturbance</li> <li>have a lack of coordinated movement (ataxia)</li> </ul> </li> </ul>	1–2
<b>Subtotal</b>	<b>4</b>
<b>Total</b>	<b>8</b>
Accept other relevant answers.	

Question 3

(24 marks)

(a) Construct a line graph from the data shown above.

(5 marks)

Description	Marks												
<p><b>Information retained over time in adolescents</b></p> <table border="1"> <caption>Data for Information Retention Graph</caption> <thead> <tr> <th>Time (days)</th> <th>Information retained (percentage)</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>100</td> </tr> <tr> <td>1</td> <td>70</td> </tr> <tr> <td>2</td> <td>50</td> </tr> <tr> <td>3</td> <td>38</td> </tr> <tr> <td>4</td> <td>30</td> </tr> </tbody> </table>		Time (days)	Information retained (percentage)	0	100	1	70	2	50	3	38	4	30
Time (days)	Information retained (percentage)												
0	100												
1	70												
2	50												
3	38												
4	30												
Title – must be descriptive	1												
Axes – both horizontal and vertical must be labelled	1												
Units – both units must be used (time in days and percentage of information retained)	1												
Scale – must be even	1												
Plotting – must be correct	1												
<b>Total</b>	<b>5</b>												

(b) Describe the pattern of memory retention as displayed in the graph.

(2 marks)

Description	Marks
there is an initial rapid drop in the amount of memory retention	1
but it levels off over time/drops to a slower rate over time	1
<b>Total</b>	<b>2</b>
Note: accept correlational answers.	

(c) Identify the concept associated with this type of graph.

(1 mark)

Description	Marks
forgetting	1
<b>Total</b>	<b>1</b>

(d) Name the researcher associated with the concept identified in part (c).

(1 mark)

Description	Marks
(Herman) Ebbinghaus	1
<b>Total</b>	<b>1</b>

- (e) Explain how the researcher named in part (d) proposed how to improve memory retention over time. (3 marks)

Description	Marks
through repetition (overlearning/relearning)	1
there is a repeated exposure to the same information/stimulus	1
resulting in improved memory retention/slower rates of forgetting over time	1
<b>Total</b>	<b>3</b>

- (f) Identify and outline **two** different rehearsal strategies and propose an example for each. (6 marks)

Description	Marks
maintenance rehearsal	1
the continuous repetition or review of the information to keep it in short-term memory	1
repeating a phone number over and over again	1
elaborative rehearsal	1
it involves making meaningful connections between new information and existing knowledge/personal experiences	1
when learning someone's name, relate it to another person who has the same name	1
<b>Total</b>	<b>6</b>
Accept other relevant answers.	

- (g) Deduce which rehearsal strategy from part (f) on page 12 was used by Group two and justify your answer. (3 marks)

Description	Marks
elaborative rehearsal	1
the amount of information retained is higher	1
and the decrease is slower	1
<b>Total</b>	<b>3</b>

- (h) State the psychological term for applying the findings of a sample to a population. (1 mark)

Description	Marks
generalisation	1
<b>Total</b>	<b>1</b>

**Question 3** (continued)

- (i) List **two** factors that can affect how well findings can be applied to a population. (2 marks)

Description	Marks
Any two of <ul style="list-style-type: none"><li>• sample size</li><li>• sampling method</li><li>• sample representativeness</li><li>• sample bias</li><li>• research design</li><li>• cultural/context factors</li></ul>	1–2
<b>Total</b>	<b>2</b>
Accept other relevant answers.	



## Question 4

(17 marks)

- (a) Contrast Selye's (1983) constructs of distress and eustress. (4 marks)

Description	Marks
eustress is a positive psychological response to a stressor that improves performance/motivation	1
while distress is a negative psychological response to a stressor that inhibits performance/become overwhelmed	1
<b>Total</b>	<b>4</b>

- (b) List
- four**
- types of stressors. (4 marks)

Description	Marks
environmental	1
psychological	1
social	1
cultural	1
<b>Total</b>	<b>4</b>

- (c) Name the tool that Holmes and Rahe developed. (1 mark)

Description	Marks
Social Readjustment Scale	1
<b>Total</b>	<b>1</b>

- (d) Identify the type of data that was produced by this questionnaire. (2 marks)

Description	Marks
subjective	1
quantitative	1
<b>Total</b>	<b>2</b>

- (e) Deduce
- one**
- common theme identified by Holmes and Rahe in the life events used in their tool. (2 marks)

Description	Marks
each event required a change or coping behaviour by the individual	1
even for those events considered positive or negative	1
<b>Total</b>	<b>2</b>

- (f) Interpret the correlation coefficient between white and African American participants. (4 marks)

Description	Marks
the rankings given by the two groups are strongly and positively related	1
this relationship is weaker than between other sub-groups of the study	1
this suggests that cultural differences (may play a part in the degree of readjustment required to different life events)	1
<b>Total</b>	<b>4</b>

## Question 5

(26 marks)

- (a) Provide a psychological definition for the term 'sleep'. (1 mark)

Description	Marks
sleep refers to periods of altered/loss of consciousness	1
<b>Total</b>	<b>1</b>

- (b) State **one** purpose of sleep according to each of these perspectives.

- (i) Evolutionary (1 mark)

Description	Marks
Any one of	
<ul style="list-style-type: none"> <li>• avoid harm from nocturnal accidents/predators</li> <li>• conservation of energy after exertion from hunting and gathering during the day</li> </ul>	1
<b>Total</b>	<b>1</b>
Accept other relevant answers.	

- (ii) Restorative (1 mark)

Description	Marks
Any one of	
<ul style="list-style-type: none"> <li>• restore energy reserves of the body</li> <li>• allow the body to replenish neurotransmitters</li> <li>• allow for the repair and growth of muscles</li> <li>• allow for the repair and growth of cells</li> </ul>	1
<b>Total</b>	<b>1</b>
Accept other relevant answers.	

- (c) Identify the stage of the sleep-wake cycle that is thought to be responsible for the majority of dreaming and state **four** characteristics of the stage. (5 marks)

Description	Marks
Stage	
rapid eye movement (REM)/REM sleep	1
Characteristics	
high brain activity (similar to wakefulness)	1
eye movement present	1
muscles in a state of virtual paralysis	1
increased/variable heart rate	1
<b>Total</b>	<b>5</b>

- (d) Identify **two** objective physiological measures that could be used to study sleep. (2 marks)

Description	Marks
Any two of	
<ul style="list-style-type: none"> <li>heart rate/pulse rate</li> <li>breathing rate</li> <li>galvanic skin response</li> </ul>	1-2
<b>Total</b>	<b>2</b>

- (e) Identify whether a directional or non-directional hypothesis would be more appropriate for this study and justify your choice. (3 marks)

Description	Marks
directional	1
a directional hypothesis is used when a specific outcome is expected (rather than just an association)	1
Ernest expects more time dreaming for his mattresses so the hypothesis should be directional	1
<b>Total</b>	<b>3</b>

- (f) Outline the method of random sampling and state **one** strength and **one** limitation of this sampling method. (3 marks)

Description	Marks
Method	
random sampling is an active process where every member of the population of interest has an equal chance of being selected to participate	1
Strength	
when used on large groups it has the best chance of an unbiased representative sample	1
Limitation (any one of)	
<ul style="list-style-type: none"> <li>it can be very difficult to conduct random sampling on a large population</li> <li>you may not achieve representatives of all the relevant demographics</li> </ul>	1
<b>Total</b>	<b>3</b>
Accept other relevant answers.	

**Question 5** (continued)

- (g) Name a measurement tool that could be used in his method. Justify why you have selected it. (2 marks)

Description	Marks
Measurement tool – any one of	
<ul style="list-style-type: none"> <li>• heart rate monitor</li> <li>• electroencephalogram/(EEG)</li> <li>• electromyogram/(EMG)</li> <li>• electrooculogram/(EOG)</li> </ul>	1
Justification	
the measurement produces an objective quantitative measure	1
<b>Total</b>	<b>2</b>
Answers could include:	
An EEG records and measures brainwave activity to show when in REM sleep. The measurement produces an objective quantitative measure.	
Accept other relevant answers.	

- (h) Name **three** types of variables and state an example of each relevant to Ernest's study. (6 marks)

Description	Marks
an independent variable	1
mattress	1
a dependant variable	1
time spent dreaming	1
a controlled variable	1
same room/same time going to bed/hours spent sleeping/same machine	1
<b>Total</b>	<b>6</b>
Accept other relevant answers.	

- (i) Propose how this sleep study could support Ernest's claim. (2 marks)

Description	Marks
by measuring REM sleep	1
Ernest could show that people sleeping on his mattresses dream more than others	1
<b>Total</b>	<b>2</b>

Question 6

(28 marks)

- (a) State the aim of the study. (1 mark)

Description	Marks
to assess the effects of restricting mobile phone use before bedtime on sleep, pre-sleep arousal, mood, and working memory	1
<b>Total</b>	<b>1</b>

- (b) Describe the sample used in the study. (3 marks)

Description	Marks
38 individuals	1
with poor sleep quality	1
with a habit of using a mobile phone before bedtime	1
<b>Total</b>	<b>3</b>

- (c) Determine the sampling method used in the study. (1 mark)

Description	Marks
convenience	1
<b>Total</b>	<b>1</b>

- (d) Give an account of the intervention used in the study. (6 marks)

Description	Marks
participants were randomly assigned to either an intervention group with restricted bedtime mobile phone use	1
or a control group with no restrictions	1
the intervention went on for four weeks	1
data was collected before the intervention	1
and after the intervention	1
the intervention group had to stop using a phone 30 minutes prior to bedtime	1
<b>Total</b>	<b>6</b>

- (e) Identify the type of data collected by the Pittsburgh Sleep Quality Index. (1 mark)

Description	Marks
quantitative	1
<b>Total</b>	<b>1</b>

- (f) State whether this method of data collection was objective or subjective. (1 mark)

Description	Marks
objective	1
<b>Total</b>	<b>1</b>

**Question 6** (continued)

(g) Define the term 'sleep latency'. (1 mark)

Description	Marks
the length of time it takes to fall asleep	1
<b>Total</b>	<b>1</b>

(h) Deduce from the graph above, the impact of the intervention on sleep latency. (1 mark)

Description	Marks
the amount of time taken to sleep/sleep latency decreased after the intervention	1
<b>Total</b>	<b>1</b>

(i) State the key finding of the study by He et al. (1 mark)

Description	Marks
restricting bedtime mobile phone use has positive benefits	1
<b>Total</b>	<b>1</b>

(j) Suggest **three** benefits of the key finding stated in part (i). (3 marks)

Description	Marks
Any three of	
<ul style="list-style-type: none"> <li>• improved sleep quality</li> <li>• reduced arousal</li> <li>• reduced negative mood</li> <li>• enhanced working memory performance (speed/accuracy)</li> <li>• decreased sleep latency</li> <li>• increased sleep duration</li> </ul>	1–3
<b>Total</b>	<b>3</b>

(k) Explain **one** limitation of the study. (3 marks)

Description	Marks
Any one of (1 x 3 marks)	
<ul style="list-style-type: none"> <li>• short intervention period (1) the intervention period was short (1) and does not examine the long-term effects of restricting mobile phone usage (1)</li> <li>• sample characteristics (1) the sample may be limited in size/characteristics/etc (1) that impacts on the generalisability of the study (1)</li> <li>• self-report measures (1) as the questionnaires and surveys were self-reports, the data was subjective (1) and open to bias (1)</li> </ul>	1–3
<b>Total</b>	<b>3</b>
Accept other relevant answers.	

- (l) Propose **one** change that could be made to improve the study. (2 marks)

Description	Marks
Any one of (1 x 2 marks)	
<ul style="list-style-type: none"> <li>incorporate objective measures (1) to reduce bias (1)</li> <li>increase the intervention time (1) to develop a better understanding of the impact of pre-sleep mobile phone usage (1)</li> <li>use a longitudinal study (1) to see if the improvements last for a long time (1)</li> </ul>	1-2
<b>Total</b>	<b>2</b>
Accept other relevant answers.	

- (m) Present an argument based on psychological research principles that disagrees with the influencer's argument. (4 marks)

Description	Marks
He et al.'s study only looked at the effects of restricting bedtime mobile phone usage	1
it would not be valid as the study did not look at all aspects of mobile phone usage	1
there are various limitations (such as sampling/size/length of intervention)	1
further research would need to occur	1
<b>Total</b>	<b>4</b>
Accept other relevant answers.	

## Section Two: Extended answer

30% (60 Marks)

## Part A

10% (26 Marks)

## Question 7

(26 marks)

Write an extended answer that demonstrates Science inquiry and Psychological knowledge and understanding in relation to the scenario above.

In your answer you must:

- define the term 'classical conditioning' (3 marks)
- describe the method of Pavlov's study and outline the aim and findings (5 marks)
- explain how Pavlov's study has contributed to the psychological understanding of learning (4 marks)
- state **three** ethical guidelines for the use of animals in research (3 marks)
- propose how Gladys could adapt the study with reference to each of these guidelines to improve the animal ethics within the study (6 marks)
- use appropriate psychological terminology (3 marks)
- acknowledge sources of information using appropriate referencing. (2 marks)

Description	Marks
<b>Define the term 'classical conditioning'</b>	
classical conditioning is a process of learning through association/pairing	1
of an innate response/reflex (unconditioned response) with a neutral stimulus	1
to eventually create a conditioned response	1
<b>Subtotal</b>	<b>3</b>
<b>Describe the method of Pavlov's study and outline the aim and findings</b>	
Pavlov aimed to determine whether he could make dogs salivate when hearing different sounds/bell not previously associated with food	1
(Pavlov inserted tubes/cannulas into dogs' cheeks) to monitor the amount of saliva they produced	1
a neutral stimulus (e.g. bell/metronome) was paired with giving the dogs food (unconditioned stimulus), producing the unconditioned response of salivation	1
this was repeated multiple times	1
Pavlov found that eventually the bell/metronome (conditioned stimulus) would produce the conditioned response of salivation without the presence of the unconditioned stimulus/food	1
<b>Subtotal</b>	<b>5</b>
<b>Explain how Pavlov's study has contributed to the psychological understanding of learning – any four of</b>	
<ul style="list-style-type: none"> <li>• Pavlov's work is the foundation of behaviourism</li> <li>• inspired the work of future researchers such as Watson and Rayner who were able to apply his principles to a human child</li> <li>• showed that a normally instinctual/reflexive response could be learnt</li> <li>• demonstrated that learning could be generalised to similar stimuli</li> <li>• demonstrated that a learnt response could be removed by no longer presenting the unconditioned stimulus (extinction)</li> </ul>	1–4
<b>Subtotal</b>	<b>4</b>
<b>State three ethical guidelines for the use of animals in research</b>	
replacement	1
reduction	1
refinement	1
<b>Subtotal</b>	<b>3</b>



Propose how Gladys could adapt the study with reference to each of these guidelines to improve the animal ethics within the study	
Gladys is unable to replace the dogs with an insentient/non-living option so, replacement cannot be used to make the study more ethical	1
Gladys can use reduction by reducing the number of dogs required	1
conducting the study on one or two dogs rather than a large number of dogs	1
Gladys can use refinement to minimise the harm caused to the dogs	1
she can implement a different technique of measuring saliva that does not require the dogs to be operated on	1
<b>Subtotal</b>	<b>6</b>
Use appropriate psychological terminology	
Accurately uses a variety of appropriate psychological terminology relevant to theories, studies, models and concepts fluently and in a clear and logical way.	3
Accurately uses some appropriate psychological terminology relevant to theories, studies, models and concepts in a clear and logical way.	2
Uses everyday language with limited relevance to theories, studies, models and concepts.	1
<b>Subtotal</b>	<b>3</b>
Acknowledges sources of information using appropriate referencing	
Consistently uses the names of the researcher/author and date/s.	2
Uses only the names of the researcher/author or date/s.	1
<b>Subtotal</b>	<b>2</b>
<b>Total</b>	<b>26</b>
Accept other relevant answers.	
Note: the use of appropriate well-labelled diagrams/drawings are acceptable but must be accompanied with an explanation.	

## Part B

20% (34 Marks)

## Question 8

(34 marks)

Write an extended response that demonstrates Science inquiry and Psychological knowledge and understanding in relation to the scenario above.

In your answer you must:

- summarise Maslow's theory on motivation (5 marks)
- describe each element of Maslow's (1954) Hierarchy of Needs (10 marks)
- recommend **two** strategies that Beverley might give to Phyllis for improving productivity in her company (6 marks)
- explain the factors from Maslow's (1970) modification that Marge is addressing in her suggestions (4 marks)
- evaluate the research design used by Beverley (4 marks)
- use appropriate psychological terminology (3 marks)
- acknowledge sources of information using appropriate referencing. (2 marks)

Description	Marks
<b>Summarise Maslow's theory on motivation</b>	
a motivational model based on a hierarchy of human needs	1
behaviour is influenced by the need that an individual is attempting to satisfy	1
<b>Any three of</b>	
<ul style="list-style-type: none"> <li>• lower needs need to be met before they can move on to a higher need</li> <li>• survival needs tend towards the bottom of the hierarchy while more intellectual or creative needs tend towards the top</li> <li>• the first four levels of the hierarchy are classified as deficiency needs while the top level is known as a growth need</li> <li>• higher-order needs can be more difficult to satisfy</li> <li>• individuals may be driven by multiple needs at the same time</li> <li>• the importance of each need may be different between individuals</li> </ul>	1–3
<b>Subtotal</b>	<b>5</b>
<b>Describe each element of Maslow's (1954) Hierarchy of Needs</b>	
physiological	1
behaviour is driven by a need for biological survival (e.g. air, food, shelter, sex)	1
safety	1
individuals seek stability, predictability and control in their life (e.g. financial security, emotional security, freedom from fear, health care)	1
love and belonging	1
individuals seek to love and be loved, both romantically and platonically	1
esteem	1
individuals need to feel good about themselves, be confident in their own value and to be valued by others	1
self-actualisation	1
the need to achieve an individual's potential (e.g. seeking personal growth or peak experiences)	1
<b>Subtotal</b>	<b>10</b>

Recommend two strategies that Beverley might give to Phyllis for improving productivity in her company – any two of (2 x 3 marks)	
<ul style="list-style-type: none"> <li>workplace discipline/on time payments/friendly management (1) all relate to safety need (1) ensure a process is in place to ensure staff follow workplace policy/ensure payments occur at the same time each pay cycle/implement training for managers in social skills (1)</li> <li>friendly management and company stability (1) relate to love and belonging need (1) opportunities for staff to socialise (outside of normal working relationships)/promote how well the company is doing through an internal newsletter (1)</li> <li>feedback/positive praise/promotion/path for career development (1) all relate to esteem needs (1) awarding an employee of the week/staff recognition program/encourage staff seeking career development or advancement (1)</li> </ul>	1–6
<b>Subtotal</b>	<b>6</b>
Explain the factors from Maslow's (1970) modification that Marge is addressing in her suggestions	
beautiful and creative approaches may meet individuals' aesthetic needs	1
aesthetic needs are higher order growth needs and include the need for appreciation and search of beauty	1
volunteering to help those in need may meet individual's transcendence needs	1
transcendence needs motivate individuals to go beyond their self to connect with a higher reality or purpose and to help others to achieve their potential	1
<b>Subtotal</b>	<b>4</b>
Evaluate the research design used by Beverley	
non-experimental	1
Beverley's research did not involve the manipulation of a variable	1
Any one of	
<ul style="list-style-type: none"> <li>low effort</li> <li>easy to administer</li> <li>naturalistic, Beverley is getting data from a real-world situation</li> </ul>	1
Any one of	
<ul style="list-style-type: none"> <li>cannot determine cause and effect</li> <li>results cannot easily be generalisable to other groups</li> </ul>	1
<b>Subtotal</b>	<b>4</b>
Use appropriate psychological terminology	
Accurately uses a variety of appropriate psychological terminology relevant to theories, studies, models and concepts fluently and in a clear and logical way.	3
Accurately uses some appropriate psychological terminology relevant to theories, studies, models and concepts in a clear and logical way.	2
Uses everyday language with limited relevance to theories, studies, models and concepts.	1
<b>Subtotal</b>	<b>3</b>
Acknowledges sources of information using appropriate referencing	
Consistently uses the names of the researcher/author and date/s.	2
Uses only the names of the researcher/author or date/s.	1
<b>Subtotal</b>	<b>2</b>
<b>Total</b>	<b>34</b>
Accept other relevant answers.	
Note: the use of appropriate well-labelled diagrams/drawings are acceptable but must be accompanied with an explanation.	

**Question 9**

**(34 marks)**

Write an extended answer that demonstrates Science inquiry and Psychological knowledge and understanding in relation to the scenario above.

In your answer you must:

- define wellbeing (2 marks)
- distinguish between subjective and psychological wellbeing (4 marks)
- summarise Diener’s (1984) model of subjective wellbeing (4 marks)
- explain how **four** components of Ryff’s (1989) psychological wellbeing model contribute to an overall sense of wellbeing (12 marks)
- explain **one** specific challenge Cecil is facing related to his wellbeing (3 marks)
- assess the benefit of using both the interview and the survey to collect and interpret data (4 marks)
- use appropriate psychological terminology (3 marks)
- acknowledge sources of information using appropriate referencing. (2 marks)

Description	Marks
<b>Define wellbeing</b>	
feeling happy and content/positive state in one’s life	1
<b>Subtotal</b>	<b>2</b>
<b>Distinguish between subjective and psychological wellbeing</b>	
subjective wellbeing focuses on an individual’s personal evaluation of their life satisfaction and emotional experiences	1
emphasises subjective perceptions and feelings	1
psychological wellbeing encompasses broader dimensions of psychological functioning	1
reflects a more comprehensive assessment of mental health and wellbeing	1
<b>Subtotal</b>	<b>4</b>
<b>Summarise Diener’s (1984) model of subjective wellbeing</b>	
life satisfaction	1
the overall evaluation of one’s life circumstances, including satisfaction with work/relationships/personal achievements	1
affective balance	1
the balance between positive and negative emotions experienced by an individual (indicating the overall emotional wellbeing)	1
<b>Subtotal</b>	<b>4</b>
<b>Explain how four components of Ryff’s (1989) psychological wellbeing model contribute to an overall sense of wellbeing – any four of (4 x 3 marks)</b>	
<ul style="list-style-type: none"> <li>• Autonomy (1) the sense of independence and self-determination/individuals feel in control of their actions and decisions (1) leads to a greater sense of fulfilment (1)</li> <li>• Environmental mastery (1) the ability to effectively manage and adapt to the external world (1) demonstrating competence in navigating challenges (1)</li> <li>• Personal growth (1) the continuous process of self-improvement and exploration (1) fostering a sense of progress and expansion of one’s capabilities/seizing opportunities for personal development (1)</li> <li>• Positive relations with others (1) the importance of meaningful and supportive connections with family, friends, and community (1) contributing to emotional wellbeing and social support (1)</li> </ul>	

<ul style="list-style-type: none"> <li>• Purpose in life (1) having clear goals, aspirations, and a sense of direction (1) which provides individuals with a sense of meaning and motivation (1)</li> <li>• Self-acceptance (1) acknowledging and embracing one's strengths and weaknesses (1) leads to greater self-esteem and inner peace (1)</li> </ul>	1–12
<b>Subtotal</b>	<b>12</b>
<b>Explain one specific challenge Cecil is facing related to his wellbeing – any one of (1 x 3 marks)</b>	
<ul style="list-style-type: none"> <li>• he experiences feelings of emptiness and dissatisfaction (1) indicating low life satisfaction (1) and low affective balance (1)</li> <li>• he struggles with work pressure/maintaining relationships/finding purpose/ balancing his needs (1) highlighting deficiencies in (1) autonomy/environmental mastery/personal growth/positive relations/purpose in life/self-acceptance (1)</li> </ul>	1–3
<b>Subtotal</b>	<b>3</b>
<b>Assess the benefit of using both the interview and the survey to collect and interpret data</b>	
this is a mixed method design	1
it collects both quantitative and qualitative data	1
which allows for statistical analysis	1
allows for rich data/understanding of meaning	1
<b>Subtotal</b>	<b>4</b>
<b>Use appropriate psychological terminology</b>	
Accurately uses a variety of appropriate psychological terminology relevant to theories, studies, models and concepts fluently and in a clear and logical way.	3
Accurately uses some appropriate psychological terminology relevant to theories, studies, models and concepts in a clear and logical way.	2
Uses everyday language with limited relevance to theories, studies, models and concepts.	1
<b>Subtotal</b>	<b>3</b>
<b>Acknowledges sources of information using appropriate referencing</b>	
Consistently uses the names of the researcher/author and date/s.	2
Uses only the names of the researcher/author or date/s.	1
<b>Subtotal</b>	<b>2</b>
<b>Total</b>	<b>34</b>
Accept other relevant answers.	
Note: the use of appropriate well-labelled diagrams/drawings are acceptable but must be accompanied with an explanation.	

## ACKNOWLEDGEMENTS

- Question 2(a)** Dot points 1–3: American Psychological Association. (2018). *APA Dictionary of Psychology: Memory*. Retrieved August, 2024, from <https://dictionary.apa.org/memory>
- Question 6(a)** He, J. W., Tu, Z. H., Xiao, L., & et al. (2020, February). Effect of Restricting Bedtime Mobile Phone use on Sleep, Arousal, Mood, and Working Memory: A Randomized Pilot Trial. *PLoS One*, 15(2). Retrieved April, 2024, from <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0228756>  
Used under a Creative Commons Attribution 4.0 International licence.

### Copyright

© School Curriculum and Standards Authority, 2024

This document – apart from any third-party copyright material contained in it – may be freely copied, or communicated on an intranet, for non-commercial purposes in educational institutions, provided that it is not changed and that the School Curriculum and Standards Authority (the Authority) is acknowledged as the copyright owner, and that the Authority's moral rights are not infringed.

Copying or communication for any other purpose can be done only within the terms of the *Copyright Act 1968* or with prior written permission of the Authority. Copying or communication of any third-party copyright material can be done only within the terms of the *Copyright Act 1968* or with permission of the copyright owners.

Any content in this document that has been derived from the Australian Curriculum may be used under the terms of the Creative Commons [Attribution 4.0 International \(CC BY\)](https://creativecommons.org/licenses/by/4.0/) licence.

*Published by the School Curriculum and Standards Authority of Western Australia*  
303 Sevenoaks Street  
CANNINGTON WA 6107