



Units 3 and 4 Psychology

Practice Exam Solutions

Stop!

Don't look at these solutions until you have attempted the exam.

Any questions?

Check the Engage website for updated solutions, then email practiceexams@ee.org.au.

Section A – Multiple-choice questions

Question 1

The correct answer is D.

Question 2

The correct answer is D.

Question 3

The correct answer is A.

Question 4

The correct answer is C.

Question 5

The correct answer is D.

Question 6

The correct answer is C.

Question 7

The correct answer is C.

Question 8

The correct answer is A.

Question 9

The correct answer is A.

Question 10

The correct answer is A.

Question 11

The correct answer is D.

Question 12

The correct answer is C.

Question 13

The correct answer is C.

Question 14

The correct answer is C.

Question 15

The correct answer is D.

Question 16

The correct answer is C.

Question 17

The correct answer is C.

Question 18

The correct answer is D.

Question 19

The correct answer is B.

Question 20

The correct answer is C.

Question 21

The correct answer is A.

Question 22

The correct answer is D.

Question 23

The correct answer is B.

Question 24

The correct answer is B.

Question 25

The correct answer is B.

Question 26

The correct answer is A.

Question 27

The correct answer is D.

Question 28

The correct answer is C.

Question 29

The correct answer is B.

Question 30

The correct answer is C.

Question 31

The correct answer is C.

Question 32

The correct answer is B.

Question 33

The correct answer is A.

Question 34

The correct answer is D.

Question 35

The correct answer is B.

Question 36

The correct answer is C.

Question 37

The correct answer is A.

Question 38

The correct answer is D.

Question 39

The correct answer is C.

Question 40

The correct answer is D.

Question 41

The correct answer is D.

Question 42

The correct answer is B.

Question 43

The correct answer is D.

Question 44

The correct answer is D.

Question 45

The correct answer is D.

Question 46

The correct answer is A.

Question 47

The correct answer is C.

Question 48

The correct answer is D.

Question 49

The correct answer is A.

Question 50

The correct answer is B.

Question 51

The correct answer is B.

Question 52

The correct answer is B.

Question 53

The correct answer is C.

Question 54

The correct answer is A.

Question 55

The correct answer is B.

Question 56

The correct answer is B.

Question 57

The correct answer is C.

Question 58

The correct answer is C.

Question 59

The correct answer is B.

Question 60

The correct answer is B.

Question 61

The correct answer is B.

Question 62

The correct answer is B.

Question 63

The correct answer is A.

Question 64

The correct answer is C.

Question 65

The correct answer is D.

Section B – Short-answer questions

Marks allocated are indicated by a number in square brackets, for example, [1] indicates that the line is worth one mark.

Question 1

- A Fixed Action pattern is a sequence of instinctive movements which is prevalent amongst nearly all members of a particular species [1]
- The mating dance of birds or any other relevant example [1]
- Not considered a learnt behaviour because a mature organism will produce the correct behaviour the first time, without prior experience, in response to particular environmental stimuli [1]

Question 2

- Subjective concept as the idea of what is considered abnormal differs depending on the context and the person viewing the behaviour [1]
- Any of:
 - Sociocultural approach [1] (with example) [1]
 - Functional approach [1] (with example) [1]
 - Historical approach [1] (with example) [1]
 - Situational approach [1] (with example) [1]
 - Medical approach [1] (with example) [1]
 - Statistical approach [1] (with example) [1]

Question 3

- Alzheimer's disease [1]
- A gradual degeneration of the brains neurons/ presence of the toxic protein – Amyloid, which literally kills brain cells & can lead to – deposits of plaque along with tangled brain fibres resulting in damaged connections between neurons and impairment in memory processes [1]
- Any 2 of the following:

§ Memory loss, personality and mood changes, confusion, disorientation, impaired attention and poor judgement [1]

§ Loss of functions (e.g. ability to talk, walk and control the bladder). [1]

§ Initially impaired declarative memory (early symptom). [1]

§ Severe decline in working memory (STM), episodic, semantic and procedural memories. [1]

§ Anterograde amnesia symptoms. [1]

§ Loss of the ability to learn new tasks [1]

§ Impaired ability to recognise close family and friends. [1]

Question 4

- Shaping: reinforcement of closer and closer approximations of desired response
- Aurelia should reward Leopold next time he goes onto his back [1]
- Next, she should only start rewarding him when he moves from his back to his side [1]
- Finally, she should only start rewarding him when he does an entire roll [1]

Question 5a

- Positive punishment: when a behaviour is followed by a negative consequence (e.g. getting smacked by parents when you use profanity). [1]
- Negative punishment/Response cost: when something desirable is removed (e.g. being fined for speeding on the roads in which the desirable stimulus is money). [1]

Question 5b

One of:

- Reinforcement/punishment is too delayed [1]
- Reinforcement/punishment is not clearly associated with behaviour [1]
- Reinforcement/punishment is not appropriate or relevant [1]
- Punishment does not offer alternative behaviour [1]
- Punishment may be too severe, causing aggressiveness or fear[1]

Or any other appropriate response.

Question 6

- A Distress is a negative psychological response to a stressor [1]
- While eustress is a positive psychological response to a stressor [1]

Question 7

1) Sensory register [1] – involved in storing incoming, brief sensory information that enters from the external environment and filtering out irrelevant information (e.g. Neville's sensory memory may be filtering out irrelevant noises in the background so that he focuses on his herbology professor) [1]

2) Short term memory [1] – receives information from the long term memory and sensory register and holds information long enough to be manipulated for everyday functions (e.g. Neville's short term memory may be retrieving information about how to correctly hold the shovel so that he can copy the actions of his professor and holding the mental image of how she inserts the root into the pot long enough for him to repeat the action) [1]

3) Long term memory [1] – a relatively permanent memory system that holds vast amounts of information for long period of time(e.g. the way the professor inserts the root into the pot may be committed to Neville's long term memory so he can retrieve the mental image at a later time) [1]

Question 8

Any of:

- Classical conditioning involves reflexive, involuntary behaviours [1], while operant conditioning involves predominately non-reflexive, voluntary or spontaneous behaviours [1]
- Classical conditioning involves the learner being passive [1], while in operant conditioning the learner is active [1]
- In classical conditioning the reinforcement is given before the response [1] while in operant conditioning reinforcement is given after the response [1]
- In classical conditioning, partial reinforcement is likely to weaken the association[1], while in operant conditioning partial reinforcement can strengthen and increase the response rate[1]

Question 9

The ability of the synapses in the brain to be modified during its growth and development (where the neurons are quite flexible in terms of their function) either through the process of strengthening neural connections or eliminating unused neural connections.

Question 10

- 1) Structural processing [1] - words are learnt by remembering the physical features (e.g. length of word, upper or lower case, started with a vowel or consonant). Approximately 20% recall rate [1]
- 2) Phonemic processing [1] – words are remembered by their sounds. Approximately 50% recall rate [1]
- 3) Semantic processing [1] – words are remembered by their meaning, allowing them to be placed directly into our semantic networks. Approximately 80% recall rate [1]

Question 11

Strengths	Limitations
<p>Any 3 of:</p> <ul style="list-style-type: none"> • Based on ongoing scientific research and regularly revised. [1] • Very comprehensive in terms of the number of disorders included and amount of information. [1] • Useful for planning treatment. [1] • Provides user-friendly guidelines that help in the diagnosis of disorders with the 'yes/no' approach, thus assisting the decision making process, i.e. if treatment is needed. [1] • Assists communication between mental health professionals and their peers. [1] 	<p>Any 3 of:</p> <ul style="list-style-type: none"> • Only looks at whether the patient has a disorder or not—does not address the severity or provide an evaluation of the symptoms present. [1] • Some disorders have low inter-rater reliability (e.g. personality disorders). [1] • High degree of overlap between symptoms for various disorders. [1] • Stigmatisation (e.g. shame due to labelling). [1] • Substantial loss of information (e.g. overlooks unique combinations of symptoms for each individual). [1]

Question 12

- Rerouting [1]: when an undamaged neuron that has lost connection with an active neuron due to damage, it seeks a new active neuron to connect with instead. [1]
- Sprouting [1]: growth of new, bushier connections on a neuron's dendrites. [1]

Question 13

Any 2 of the following:

- Has not been proven that decay is the cause of forgetting something in our LTM. [1]
- Unable to explain the sudden recollection (after lack of use) when presented with correct cues. [1]
- Individuals may also retrieve procedural memories even after years of not retrieving it (e.g. riding a bike, recognising names and faces of those from our childhood). [1]

Question 14

- Helps with formation of explicit (long-term declarative) memories and difficult tasks which draw upon declarative memory (e.g. learning to spell unfamiliar words). [1]
- Helps transfer explicit memories to relevant parts of the brain for permanent storage (transferring them from short-term to long-term memory) [1]

Question 15a

Neutral stimulus – the white rat [1]

Unconditioned stimulus – the loud noise [1]

Conditioned response – fear in response to fluffy white objects [1]

Question 15b

Any of:

- Informed consent [1] : Albert's mother may not have been informed about the nature of the experiment [1]
- Voluntary participation [1]: Albert's mother had not volunteered him for the research [1]
- Debriefing [1]: Albert's mother was not debriefed at the conclusion of the experiment and the fear was not extinguished [1]
- Withdrawal rights [1]: Albert was not given the opportunity to withdraw from the study [1]

Question 16

Any 3 of:

- NREM Stage 1 – EEG would show some alpha waves and theta waves would begin to appear [1] EOG would show slow, rolling eye movement [1]
- NREM Stage 2 – EEG would show theta brain waves, sleep spindles and K-complexes [1] EOG would show little activity as eye movement are rare in this stage[1]
- NREM Stage 3 – EEG would show a mix of theta waves and delta waves, with increasing delta waves [1] EOG would show little activity as eye movements are rare in this stage [1]
- NREM Stage 4 – EEG would show a mix of theta waves and delta waves, with 50% delta waves [1] EOG would show little activity as eye movements are rare in this stage [1]
- REM – EEG patterns resemble those of a person who is awake and active, consisting of irregular, beta-like waves. Sawtooth waves may be found amongst these waves [1] EOG would show high activity, with rapid, jerky eye movements occurring in this stage [1]

Section C – Extended response questions

Question 1

Convenience sampling [1]

Question 2

Any 2 of:

- Beneficence - no harm on participant maximise benefit to society [1]
It is the responsibility of the researcher to maximise the possible benefits of the research while minimising the risks of harm of discomfort to the participant. [1]
- Respect for persons - no harm on participant maximise benefit to society [1]
The researcher must properly regard the welfare, rights, beliefs, perceptions and cultural heritage of all individuals involved in the research [1]
- Participants rights - all rights must be upheld [1]
The participant must have an understanding of what the researchers are doing to them and why. [1]
- Voluntary Participation - person must willingly agree of parental consent [1]
Willingly agree and give consent to participate (if under 18 – parents/guardians must give consent.) [1]
- Informed Consent - participant or guardian informed of what experiment involves [1]
Before a participant or parent/guardian gives consent, they must be informed of the nature of purpose of the study. [1]
- Confidentiality - results and identity remain private [1]
Anonymity of the participant must be preserved. All results must be kept private [1]
- Withdrawal rights - right to leave at any time [1]
- The participant has the right to withdraw at any time without having to provide and explanation. Also the participant has the right to ask for their results to be excluded from the study if they feel uncomfortable [1]
- Psychological Harm (No harm to participant) - no long term harm must come to participant [1]
- The participant should not be hurt or altered in any way that will have a negative effect on their life in the long run, which will disrupt their average functioning and everyday life. [1]
- Debriefing - participants made aware of purpose of experiment, counselling provided if needed [1]
- Is where the participants are informed of the nature, study's true purpose once the experiment has ended. During debriefing the researcher must also correct any mistaken attitudes or beliefs held by participants, and explain all the deception related to conducting the experiment. Must also provide counselling if needed [1]
- Deception - participant unaware, needs to be informed [1]
- Use of deception, the act of deceiving necessary for the purpose of the study, must be informed of deception after study concluded and given any assistance if needed. [1]

Question 3

Independent groups design. [1] One limitation of this design is that individual participant variables between groups could have a confounding effect on results obtained. [1]

Question 4

A range of responses may be appropriate. Seek individual feedback from a teacher or tutor. Assessment criteria include:

- Identify and describe the key terms/theories/issues
- Explain the relevant terms/theories/issues and make connections between psychological concepts and data and research
- Use appropriate examples and evidence to support the response
- Interpret and analyse the issues/data/information
- Evaluate issues/data/information and draw appropriate conclusions