

Student Name: _____

PSYCHOLOGY

Unit 4 - Written examination 2



2009 Trial Examination

Reading Time: 15 minutes

Writing Time: 1 hour 30 minutes

QUESTION AND ANSWER BOOK

Structure of book

<i>Section</i>	<i>Area of study</i>	<i>Number of questions</i>	<i>Number of questions to be answered</i>	<i>Number of marks</i>
A	1. Memory	22	22	22
	2. Learning	22	22	22
B	1. Memory	7	7	13
	2. Learning	5	5	14
	3. Research methods	8	19	19
				Total 90

- Students are permitted to bring into the examination room: pens, pencils, highlighters, erasers, sharpeners and rulers.
- Students are NOT permitted to bring into the examination room: blank sheets of paper and/or white out liquid/tape.

Materials supplied

- Question and answer book of 19 pages.

Instructions

- Print your name in the space provided on the top of this page.
- All written responses must be in English.

Students are NOT permitted to bring mobile phones and/or any other electronic communication devices into the examination room.

SECTION A - Multiple-choice questions

Instructions for Section A

Answer all questions.

Choose the response that is **correct** or that **best answers** the question.

A correct answer scores 1, an incorrect answer scores 0.

Marks will **not** be deducted for incorrect answers.

No marks will be given if more than one answer is completed for any question.

AREA OF STUDY 1 – MEMORY

Question 1

Research has shown that _____ is a more sensitive measure of retention than _____.

- A. recognition; recall
- B. recall; recognition
- C. recognition; relearning
- D. recall; relearning

Question 2

The auditory information that our senses first receive is stored initially in

- A. episodic memory.
- B. sensory memory.
- C. long-term memory.
- D. phonological loop.

Question 3

When playing soccer, Chris suffers a hard knock to the head and loses consciousness. When he recovers, he cannot remember anything about the soccer match. Which theory best describes why Chris cannot recall this information?

- A. decay theory
- B. motivated forgetting theory
- C. interference theory
- D. consolidation theory

Question 4

A person is consciously aware of a memory when it is in their

- A. sensory memory.
- B. short-term memory.
- C. long-term memory.
- D. episodic memory.

SECTION A - AREA OF STUDY 1 - continued

Question 5

Explicit memory involves either _____ or _____ memory.

- A. iconic; echoic
- B. semantic; episodic
- C. anterograde; retrograde
- D. sensory; working

Question 6

The subsystem of working memory which allows us to retain visual information for a short period of time is known as

- A. the phonological loop.
- B. echoic memory.
- C. the visuospatial sketchpad.
- D. iconic memory.

Question 7

According to Baddeley's model of working memory, the storage of auditory information is a function of the _____ and the processing of complex information is due to the function of the _____.

- A. phonological loop; visuospatial sketchpad
- B. visuo-spatial sketchpad; central executive
- C. central executive; phonological loop
- D. phonological loop; central executive

Question 8

The concept that describes how information is stored and organised according to meaningful groupings in long-term memory is known as the

- A. information-processing model.
- B. working memory model.
- C. semantic network theory.
- D. serial position effect.

Question 9

The process of passing information from long-term memory to short-term memory is known as

- A. retrieval.
- B. encoding.
- C. chunking.
- D. forgetting.

**SECTION A - AREA OF STUDY 1 - continued
TURN OVER**

Question 10

William has just been introduced to five people at a party. In order to remember their names William pictures the person eating a cake with their name on it. This is an example of

- A. elaborative rehearsal.
- B. consolidation rehearsal.
- C. maintenance rehearsal.
- D. semantic rehearsal.

Question 11

An example of forgetting as a result of organic causes is

- A. brain damage.
- B. motivation.
- C. interference.
- D. decay.

Question 12

Harry has just bought a new mobile phone which has a new phone number. He has a lot of trouble remembering the new number as it is similar to his old phone number. This problem is due to

- A. anterograde amnesia.
- B. retroactive interference.
- C. proactive interference.
- D. retrograde amnesia.

Question 13

A theory that attempts to describe which items will be best recalled in order from a list is called the

- A. semantic network theory.
- B. consolidation theory.
- C. serial position effect.
- D. item recall theory.

Question 14

David describes to Jayne the exciting party he went to on the weekend. The information about the weekend is being retrieved from David's

- A. procedural memory.
- B. implicit memory.
- C. episodic memory.
- D. semantic memory.

Question 15

Jazmin listened to a list of 15 words. She was asked to recall the list 15 minutes later. Jazmin was more likely to remember items from

- A. the start of the list.
- B. the middle of the list.
- C. the end of the list.
- D. the middle and end of the list.

Question 16

Jazmin then listened to a list of 15 different words. She was asked to recall the list immediately after hearing them. Jazmin was more likely to remember more items from

- A. the start and middle of the list.
- B. the middle of the list.
- C. the end of the list.
- D. the start and end of the list.

Question 17

Jonathan suffered a head injury after a car accident. Jonathan has had difficulty forming new memories after the accident. This is an example of

- A. proactive interference.
- B. retroactive interference.
- C. anterograde amnesia.
- D. retrograde amnesia.

Questions 18, 19 and 20 relate to the following information.

Brooke's grandmother is a healthy 80 year old. She is an excellent cook, however she has trouble remembering the facts of significant events in world history.

Question 18

The example of Brooke's grandmother demonstrates there is some deterioration in memory due to ageing, where _____ memories are more likely to decline than _____ memories.

- A. procedural; episodic
- B. semantic; procedural
- C. procedural; semantic
- D. semantic; episodic

SECTION A - AREA OF STUDY 1 - continued
TURN OVER

Question 19

Brooke's grandmother's memory decline is most likely a result of

- A. retrograde amnesia.
- B. slowing of the central nervous system.
- C. decay.
- D. motivated forgetting.

Question 20

As Brooke's grandmother ages further she is

- A. unlikely to remember any new material.
- B. likely to perform better on recognition tests.
- C. unlikely to experience large memory losses.
- D. likely to forget all her memories.

Question 21

Michael is asked by the police to accompany them to the scene of a crime that he witnessed. He finds that being in the same location of the crime helps him accurately recall the events that occurred. Michael is using _____ to help him recall the crime.

- A. context dependent cues
- B. loci dependent cues
- C. state dependent cues
- D. the method of loci

Question 22

In an experiment looking at the effects of illicit drugs on memory, which of the following is most probably a significant result?

- A. $p > 0.01$
- B. $p < 0.1$
- C. $p > 0.1$
- D. $p < 0.01$

END OF AREA OF STUDY 1
SECTION A - continued

AREA OF STUDY 2 – LEARNING

Question 23

Salmon swimming upstream to spawn are displaying behaviour known as

- A. behaviours dependent on maturation.
- B. fixed action patterns.
- C. reflex actions.
- D. classical conditioning.

Question 24

Which of the following behaviours demonstrates behaviour dependent on maturation?

- A. a bird pecking at its parent's beak
- B. a spider spinning a web
- C. a child learning to talk
- D. a child crawling

Question 25

Learning involves behaviour that results from

- A. reflexes.
- B. maturation.
- C. motivation.
- D. experience.

Question 26

Which of the following behaviours is learned?

- A. withdrawing your hand from a hot plate
- B. being able to walk at 12 – 14 months of age
- C. flinching before a balloon bursts
- D. your eyes dilating at the sight of a big spider

Question 27

In classical conditioning, an organism develops an association between the

- A. unconditioned stimulus and the conditioned stimulus.
- B. neutral stimulus and the conditioned stimulus.
- C. conditioned stimulus and the conditioned response.
- D. unconditioned response and the neutral stimulus.

Question 28

Before learning, an unconditioned stimulus elicits

- A. an unconditioned response.
- B. a neutral response.
- C. a conditioned stimulus.
- D. a conditioned response.

**SECTION A - AREA OF STUDY 2 – continued
TURN OVER**

Question 29

In classical conditioning, the reappearance of a conditioned response after a period of extinction is known as

- A. acquisition.
- B. spontaneous recovery.
- C. stimulus generalisation.
- D. stimulus discrimination.

Question 30

Michelle likes to eat ice-cream. She has learnt to ask her mother for ice cream only if her mother is in a good mood. Michelle's behaviour is an example of

- A. negative reinforcement.
- B. observational learning.
- C. stimulus discrimination.
- D. stimulus generalisation.

Questions 31 and 32 relate to the following information.

Roger's dog runs around in circles at the sound of the can opener. The can opener usually signals that his dinner is about to be served.

Question 31

In this example, the dog running around in circles at the sound of the can opener is the

- A. conditioned stimulus.
- B. neutral stimulus.
- C. conditioned response.
- D. unconditioned response.

Question 32

In this example the sound of the can opener is the

- A. conditioned stimulus.
- B. neutral stimulus.
- C. conditioned response.
- D. unconditioned response.

Question 33

In Pavlov's experiments on salivation in dogs, the unconditioned response was _____ and the conditioned stimulus was _____.

- A. the bell; the meat powder
- B. the meat powder; the bell
- C. salivation; the bell
- D. the bell; the bell

Question 34

In Thorndike's original experiments, the behaviour of an animal when first placed in the puzzle box was

- A. rewarded.
- B. reinforced.
- C. punished.
- D. random.

Question 35

Which schedule of reinforcement results in the fastest acquisition of behaviour?

- A. fixed ratio
- B. fixed interval
- C. variable interval
- D. continuous

Question 36

Which schedule of reinforcement results in the fastest extinction of behaviour?

- A. fixed ratio
- B. fixed interval
- C. variable interval
- D. continuous

Question 37

If you wanted a rat in a Skinner Box to respond with a moderate response rate that is often erratic, which schedule of reinforcement would you use?

- A. fixed interval
- B. variable interval
- C. fixed ratio
- D. variable ratio

Question 38

Classical conditioning differs from operant conditioning in that

- A. operant conditioning involves reflexive responses.
- B. the response in operant conditioning is voluntary.
- C. the response in classical conditioning occurs before the stimulus.
- D. reinforcement is more likely to occur in classical conditioning.

Question 39

Behaviour learnt through classical conditioning rather than through operant conditioning is more likely to be

- A. active.
- B. passive.
- C. voluntary.
- D. deliberate.

**SECTION A - AREA OF STUDY 2 – continued
TURN OVER**

Question 40

George enjoys watching his son play soccer; he feels a great sense of pride when his son plays well. George wants his son to play soccer for Australia one day. The reinforcement George receives when his son does well is an example of

- A. self reinforcement.
- B. vicarious reinforcement.
- C. external reinforcement.
- D. crowd reinforcement.

Question 41

Kylie has recently taken up yoga. Her yoga teacher always demonstrates new moves before Kylie attempts them herself. What type of learning is Kylie experiencing?

- A. trial and error learning
- B. classical conditioning
- C. shaping
- D. observational learning

Question 42

Findings from Bandura's BoBo doll experiments suggest that

- A. girls were more aggressive than boys regardless of the consequence for the model.
- B. children will imitate aggressive behaviour if they are rewarded for it, even if the model is punished.
- C. children will not imitate aggressive behaviour shown in a film.
- D. girls were as aggressive as boys when there was no consequence for the model.

Question 43

Harry Harlow investigated a type of learning that results from a positive transfer of skills from previous experiences to a new, similar learning situation. This is known as

- A. operant conditioning.
- B. classical conditioning.
- C. shaping.
- D. learning set.

Question 44

Krystal has been playing netball for the past 10 years. When she played a basketball game, she found she was excellent at shooting goals. This is due to a _____ transfer of skills due to her _____ of basketball skills.

- A. negative; learning set
- B. negative; modelling set
- C. positive, modelling set
- D. positive, learning set

END OF SECTION A

SECTION B – Short-answer questions

Instructions for Section B
Answer **all** questions in the spaces provided.

AREA OF STUDY 1 – MEMORY

Question 1

Distinguish between encoding and retrieval of information in memory.

2 marks

Question 2

Describe the capacity and duration for each of the three levels of memory:

Sensory memory_____

Short-term memory_____

Long-term memory_____

3 marks

Question 3

What formula is used to determine the savings score when using relearning as the measure of retention?

1 mark

SECTION B - AREA OF STUDY 1 - continued
TURN OVER

Question 4

According to the semantic network theory, how is information retrieved from long-term memory?

1 mark

Question 5

Describe what the forgetting curve shows.

1 mark

Question 6

Use an example to explain the mnemonic technique ‘narrative chaining’. What type of material is most suitable for using this mnemonic technique?

3 marks

SECTION B - AREA OF STUDY 1 - continued

Question 7

Distinguish between retrieval failure and decay theory in terms of forgetting.

2 marks

END OF AREA OF STUDY 1
SECTION B - continued
TURN OVER

AREA OF STUDY 2 – LEARNING

Question 8

Define the term ‘reflex action’ and provide an example of one.

2 marks

Question 9

Henry was stung by a bee when he was five years old. He had an allergic reaction, became itchy and vomited violently. Now every time he sees any flying insect he feels itchy and very nauseous. Identify the following elements from this example:

Unconditioned stimulus _____

Unconditioned response _____

Conditioned stimulus _____

Conditioned response _____

4 marks

Question 10

Name and describe one ethical principle which was not followed in Watson and Rayner’s experiment on ‘Little Albert’.

2 marks

SECTION B - AREA OF STUDY 2 - continued

AREA OF STUDY 3 – RESEARCH INVESTIGATION

*Read the following research investigation. All the questions which follow relate to this investigation.
Answer all the questions.*

Cameron is a Psychology teacher who is interested in studying the effects of caffeine on memory ability. Cameron works at Lake View Secondary College, a coeducational secondary school. There are 250 VCE students at the college, 150 students in Year 11 and 100 students in Year 12. Cameron randomly selects a group of 25 VCE students to act as participants in his study, ensuring that he has the same proportions of Year 11 and Year 12 students in the sample as in the population. Cameron obtained informed consent from the participants. In the first trial, Cameron gave all the participants a test of recall of 30 nouns. In the second trial, Cameron gave the same participants a similar recall test 20 minutes after they had consumed 200 ml of strong coffee. Cameron marked all the recall tests and recorded the number of correct answers.

The results were as follows.

Trial 1 (no coffee): Mean test score = 78%

Trial 2 (coffee): Mean test score = 85%

A statistical test on these results found that $p \geq 0.05$

Question 13

Write an appropriate operational hypothesis for this research study.

2 marks

SECTION B - AREA OF STUDY 3 - continued

Question 14

Name the type of sampling that was used in this research.

1 mark

Question 15

a. Name the experimental design used in this study.

1 mark

b. What is the main advantage of using this research design?

1 mark

c. Name one disadvantage of using this research design.

1 mark

d. Name the method for overcoming this disadvantage.

1 mark

Question 16

Identify the independent and dependent variables of this study.

2 marks

SECTION B - AREA OF STUDY 3 - continued
TURN OVER

Question 17

Are the results of this study statistically significant? Explain.

1 mark

Question 18

Can Cameron make any generalisations from the results to the wider population based on the results of the research? Explain.

2 marks

Question 19

Cameron writes a formal research report based on the study. List four pieces of information he should include in the discussion section of his report.

4 marks

SECTION B - AREA OF STUDY 3 - continued

Question 20

Name and describe three ethical principles that Cameron should follow in the conduct of this study.

3 marks

END OF QUESTION AND ANSWER BOOK