

Student Name: _____

PSYCHOLOGY

Unit 4 – Written examination 2



2008 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	14
	2. Learning	5	5	14
	3. Research Investigation	9	9	18
				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.
- Answer sheet for multiple-choice questions.

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 complete for any question.

AREA OF STUDY 1 – MEMORY

Question 1

We are able to store visual information for approximately one third of a second in our _____ memory, which is a part of our _____ memory system.

- A. echoic; sensory
- B. iconic; short-term
- C. echoic; short-term
- D. iconic; sensory

Question 2

The three memory systems according to the *information processing model* in order of processing are considered to be

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

Question 3

The measure of retention used in answering multiple-choice questions in an exam is

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

Question 4

The most sensitive measure of retention is

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

Question 5

It is possible to increase the duration of short-term memory using the process known as

- A. chunking.
- B. elaboration.
- C. recognition.
- D. rehearsal.

SECTION A- AREA OF STUDY 1- continued

Question 6

It is possible to increase the capacity of short-term memory using the process known as

- A. chunking.
- B. rehearsal.
- C. elaboration.
- D. controlling.

Question 7

Samantha asked her grandmother about the names of the students in her year 12 class from 50 years ago, Samantha's grandmother could not name any of the students. Samantha located her grandmother's year 12 class photograph and was surprised how many names her grandmother could now remember while looking at the photograph. The reason for Samantha's grandmother being able to remember the names only after seeing the photograph is due to

- A. free recall being more sensitive than recognition.
- B. free recall being less sensitive than relearning.
- C. recognition being more sensitive than relearning.
- D. recognition being more sensitive than free recall.

Question 8

According to George Miller, the capacity of short-term memory is approximately

- A. 5 items.
- B. 7 items.
- C. 9 items.
- D. 11 items.

Question 9

Jazmin was studying for an upcoming psychology test. In order to remember the many definitions, she was able to use information that she had learnt in biology last year, as the topics were similar. This is an example of what memory improving technique?

- A. elaboration
- B. maintenance rehearsal
- C. chunking
- D. context

Question 10

Remembering the brand of your bike is an example of _____ memory;
remembering the first time you rode your bike is an example of _____ memory;
and your memory of how to ride your bike is an example of _____ memory.

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

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

Question 11

Alice has asked each of the 15 students in her new psychology class to say their names in order for her to learn them. According to the serial position effect which names are Alice most likely to recall the best if tested immediately after all students have said their names.

- A. the first few students
- B. the middle students
- C. the last few students
- D. none of the students

Question 12

Part of the serial position effect, described in Question 11 above, occurs because

- A. the middle items have been encoded into long-term memory.
- B. the last items have been encoded into long-term memory.
- C. the first items are still in short-term memory.
- D. the last items are still in short-term memory.

Question 13

Proactive interference refers to

- A. information learned previously interferes with the ability to remember new information.
- B. new information interferes with the ability to remember information learned previously.
- C. the inability to recall information previous to a traumatic event.
- D. the inability to form new memories after a traumatic event.

Question 14

The two types of long-term memories which are considered to be explicit are

- A. semantic and procedural.
- B. episodic and procedural.
- C. semantic and episodic.
- D. procedural and declarative.

Question 15

Krystal fell off a log playing with friends and hit her head on the road. Afterwards she found that her ability to retain new memories was not the same as prior to the accident. This is an example of

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

Question 16

Brooke travels to school on the bus; her ability to remember where the seat is that she usually sits in is an example of a/an

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

SECTION A- AREA OF STUDY 1- continued

Question 17

Research into the effects of ageing on memory has shown

- A. processing speed in STM is reduced due to increased efficiency of the nervous system.
- B. processing speed in LTM is reduced due to reduced efficiency of the nervous system.
- C. there is no difference in processing speed for different types of task.
- D. complex tasks such as manipulating various types of information is often more difficult for elderly people.

Question 18

Nic is going on a holiday to Greece for the summer, he looks at a map of the world to determine how long it will take to fly there. Nic's ability to identify the country of Greece is an example of

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

Question 19

Which of the following is not an explanation for forgetting information?

- A. being in the same physical state as when the information was learnt
- B. suppression of painful memories
- C. inability to use the correct retrieval cues
- D. both A & C

Question 20

If the physical trace of a memory has faded due to disuse this is known as

- A. semantic network theory.
- B. decay theory.
- C. consolidation theory.
- D. repression.

Question 21

Which p value indicates that there is a less than 5 in 100 chance that the results are due to chance?

- A. $p > 0.05$
- B. $p < 0.50$
- C. $p = 0.05$
- D. $p < 0.05$

Question 22

Harley is giving a statement to police about a robbery he witnessed. In an attempt to accurately recall the events of the crime he accompanies police to the scene of the crime.

Harley is using _____ to help him recall the crime.

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

END OF AREA OF STUDY 1
SECTION A – continued
TURN OVER

AREA OF STUDY 2 – LEARNING

Question 23

An automatic response that occurs as the result of previous experience is known as a

- A. reflex action.
- B. fixed action pattern.
- C. conditioned reflex.
- D. behaviour due to maturation.

Question 24

Most infants begin crawling at approximately 6 months of age. This is an example of

- A. a reflex action.
- B. a fixed action pattern.
- C. a behaviour due to maturation.
- D. operant conditioning.

Question 25

The stages of classical conditioning in order of appearance are

- A. acquisition, extinction, spontaneous recovery.
- B. acquisition, spontaneous recovery, extinction.
- C. extinction, spontaneous recovery, acquisition.
- D. extinction, acquisition, spontaneous recovery.

Question 26

In Pavlov's experiment on salivation in dogs, the neutral stimulus 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 27

Stephanie was bitten by a rabbit when she was five years old. On her ninth birthday, her parents bought her a rabbit. Stephanie was so afraid of the rabbit that her parents had to return it to the pet store.

Stephanie's fear of the rabbit was due to

- A. stimulus generalisation.
- B. observational learning.
- C. shaping.
- D. observational learning.

Question 28

Danielle notices that every time she picks up her dogs food bowl her dog becomes very excited and runs around in circles. The dog's behaviour is an example of

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

SECTION A- AREA OF STUDY 2 – continued

Question 29

Rachel has a part time job picking fruit. She is paid \$10 for every bucket of fruit picked. This is an example of a _____ schedule of reinforcement.

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

Question 30

Which schedule of reinforcement results in the slowest extinction of a learned behaviour?

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

Question 31

Thorndike identified the cat trying many different random movements to escape from the puzzle box as _____, once the cat had learned which action caused it to be able to escape from the puzzle box as _____.

- A. trial and error; instrumental learning
- B. operant conditioning; shaping
- C. trial and error; shaping
- D. shaping; operant conditioning

Question 32

Kristy enjoyed eating seafood however one night after eating a meal of seafood take-away she becoming very nauseous, now she is unable to think of eating seafood without becoming nauseous. This is an example of

- A. taste aversion.
- B. trial and error learning.
- C. aversion therapy.
- D. operant conditioning.

Question 33

The light switch in David's garage is faulty so that every time he touches the switch he receives a mild electric shock. Now, every time David sees a light switch he associates it with a startled response. In this scenario the conditioned stimulus is

- A. the electric current.
- B. the startle response.
- C. the light switch.
- D. the garage.

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

Question 34

Kate takes her dog for a walk after school every day. Before going for the walk, Kate changes out of her school shoes and into her sports runners. Now she notices that every time she changes into her sports runners, her dog rushes to the front door excitedly. In this scenario going for a walk is the _____ and Kate changing her shoes is the _____.

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

Question 35

Which of the following is an example of punishment?

- A. a teacher giving a student an 'excellent' stamp for completed work
- B. a rat pushing a lever to take away an electric shock
- C. allowing a student to complete an extra task to increase their mark
- D. making a child sit in the naughty corner for 10 minutes

Question 36

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

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

Question 37

B. F. Skinner's original experiments were famous for using

- A. dogs salivating to bells.
- B. cats in a puzzle box.
- C. an operant conditioning chamber.
- D. model's acting violently towards a 'bobo doll'.

Questions 38, 39, 40 and 41 relate to the following information.

Jack has always wanted to be an AFL footballer. Every week during the football season he goes to watch his favourite team play. Jack is hoping to learn how to become a great footballer by watching and learning from his favourite player. After the game each week Jack goes to the park and imitates his favourite player's moves.

Question 38

Jack's learning of how to become a great football player relies on the principles of

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

SECTION A- AREA OF STUDY 2- continued

Question 39

Jack receives additional motivation when he observes the crowd cheering his favourite player for kicking a goal, this is an example of

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

Question 40

Jack is quite short, however his favourite player is very tall. This relates to which factor that might influence Jack's learning?

- A. attention
- B. reproduction
- C. motivation
- D. retention

Question 41

In terms of observational learning Jack's favourite player would be known as the

- A. operant.
- B. model.
- C. learner.
- D. observer.

Question 42

Kristen has been playing basketball for the past 10 years, one of her friends asks her to fill in for the shooter in her netball team. Kristen's friend is hoping that a _____ transfer of skills to shooting a netball will result from her _____ for shooting a basketball.

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

Question 43

Bandura's BoBo doll experiments found that children were more likely to imitate the aggressive behaviour of the observed model if

- A. the model was positively reinforced
- B. the model was punished
- C. there was no shown consequence to the model's aggressive behaviour
- D. both A and C

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

Question 44

Sarah completed year 12 three years ago. Every time she hears her year 12 graduation song on the radio she feels sad as she misses all of her school friends. In terms of classical conditioning, the song in the scenario is the

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

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

What does the concept ‘relative sensitivity of a measure of retention’ refer to and identify the measure of retention which is the most sensitive?

2 marks

Question 2

Describe how information is stored in each of the three levels of memory.

Sensory memory _____

Short-term memory _____

Long-term memory _____

3 marks

Question 3

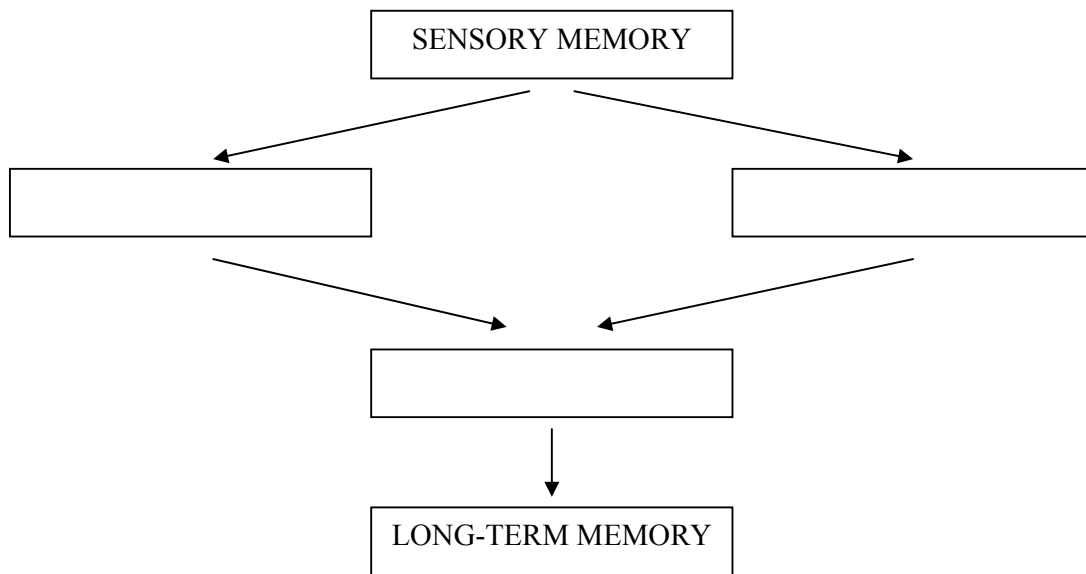
Define semantic memory. Provide an example to illustrate your answer.

2 marks

SECTION B- AREA OF STUDY 1- continued
TURN OVER

Question 4

Complete the following diagram which outlines the processes involved in Baddeley's working memory model.



3 marks

Question 5

Distinguish between the terms suppression and repression.

2 marks

SECTION B- AREA OF STUDY 1- continued

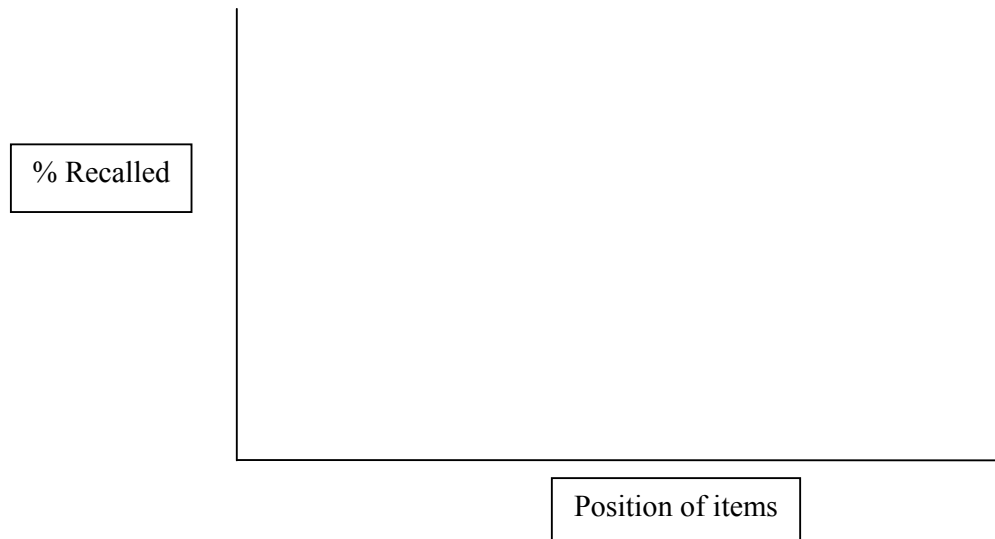
Question 6

With reference to the consolidation theory, explain why people who undergo severe trauma to the head commonly cannot accurately recall how the trauma occurred.

1 mark

Question 7

Miss Kamcev's psychology class are completing a Research Investigation into the Serial Position Effect. As a part of the experiment the participants are asked to recall 15 words after a 30 second delay between initial learning and recall. Plot on the graph below the typical shape that you would expect the graph of the results to take.



1 mark

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

AREA OF STUDY 2 – LEARNING

Question 8

Define the term ‘maturation’ and provide an example.

2 marks

Question 9

Identify the following elements of Watson’s study on ‘Little Albert’.

Unconditioned stimulus _____

Unconditioned response _____

Conditioned stimulus _____

Conditioned response _____

4 marks

Question 10

In Thorndike’s studies, the cats learned to escape from a puzzle box to get fish. From his studies Thorndike developed the ‘law of effect’. State Thorndike’s law of effect.

1 mark

SECTION B-AREA OF STUDY 2- continued

Question 11

Using examples distinguish between negative reinforcement and punishment.

4 marks

Question 12

Describe three factors that could influence the effectiveness of reinforcement.

3 marks

END OF AREA OF STUDY 2
SECTION B - continued
TURN OVER

AREA OF STUDY 3 – RESEARCH INVESTIGATION

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

Vicky is a psychology teacher who was interested in studying the effects of listening to music on concentration. Vicky works at Hilltop Secondary College, a coeducational secondary school. There are 150 VCE students at the college, 75 students in Year 11 and 75 students in Year 12. Vicky selects a group of 30 VCE students who are studying in the VCE room to act as participants in her study. Vicky obtained informed consent. In the first trial, Vicky gave the participants a general knowledge test to complete while they listened to assorted music on their MP3 players. In the second trial, Vicky gave the same participants a general knowledge test of similar difficulty to complete while there was no music being played. Vicky marked all general knowledge tests and recorded the number of correct answers.

The results were as follows.

Trial 1 (background music): Mean test score = 75%
Trial 2 (no background music): Mean test score = 80%

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

Was random sampling used in this study? Explain your answer.

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

There is a basic flaw in the method of this study.

c. Name this flaw, and explain how it could have affected the results.

Name _____

Explanation _____

2 marks

d. Name the method of overcoming this flaw

1 mark

**SECTION B-AREA OF STUDY 3- continued
TURN OVER**

Question 16

Can Vicky draw a conclusion about the population from which the sample was drawn. Explain.

2 marks

Question 17

Vicky writes a formal research report based on the study. List two main points of information she should include in the discussion section of her report on this study.

2 marks

Question 18

Describe how Vicky could have obtained informed consent from the participants.

2 marks

SECTION B-AREA OF STUDY 3- continued

Question 19

Describe two ethical responsibilities that Vicky should follow in the conduct of this study.

2 marks

Question 20

Are the results of this study statistically significant?

1 mark

Question 21

Why is this study an experiment?

1 mark

END OF QUESTION AND ANSWER BOOK