



Victorian Certificate of Education 2008

SUPERVISOR TO ATTACH PROCESSING LABEL HERE

STUDENT NUMBER

Figures

Words

Letter

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PSYCHOLOGY

Written examination 2

Thursday 6 November 2008

Reading time: 9.00 am to 9.15 am (15 minutes)

Writing time: 9.15 am to 10.45 am (1 hour 30 minutes)

QUESTION AND ANSWER BOOK

Structure of book

<i>Section</i>	<i>Number of questions</i>	<i>Number of questions to be answered</i>	<i>Number of marks</i>
A	44	44	44
B	22	22	46
			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.
- No calculator is allowed in this examination.

Materials supplied

- Question and answer book of 18 pages.
- Answer sheet for multiple-choice questions.

Instructions

- Write your **student number** in the space provided above on this page.
- Check that your **name** and **student number** as printed on your answer sheet for multiple-choice questions are correct, **and** sign your name in the space provided to verify this.
- All written responses must be in English.

At the end of the examination

- Place the answer sheet for multiple-choice questions inside the front cover of this book.

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

SECTION A – Multiple-choice questions**Instructions for Section A**

Answer all questions in pencil on the answer sheet provided for multiple-choice 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**

Terry has just attended a first-aid class during which he learnt a large amount of new information. He repeats this information to his mother when he gets home.

The sequence which best describes the memory process Terry used is

- A. storage; retrieval; encoding.
- B. encoding; storage; retrieval.
- C. storage; encoding; retrieval.
- D. retrieval; encoding; storage.

Question 2

Samantha was attempting to recall the names of the students in her Year 8 class. At home she was able to remember 17 of the 26 names. Later, when she looked at an alphabetical list of **all** the students in Year 8, she found she could remember 25 of the names of the students in her class.

At home, Samantha was using _____ but when she saw the list of names, she was using _____.

- A. state dependent cues; context dependent cues
- B. context dependent cues; state dependent cues
- C. recall; recognition
- D. recognition; recall

Question 3

The component of working memory that retrieves information from long-term memory is called the

- A. central executive.
- B. visuospatial sketchpad.
- C. phonological loop.
- D. semantic network.

Question 4

Ben is walking along the street when a fire engine passes with its lights flashing and siren sounding.

These visual **and** auditory stimuli are registered first in Ben's

- A. iconic memory.
- B. working memory.
- C. echoic memory.
- D. sensory memory.

Question 5

Sensory memory

- A. is known as working memory.
- B. is a limited capacity store that can maintain unrehearsed information for up to about 20 seconds.
- C. preserves information in its original form for less than a few seconds.
- D. is an unlimited capacity store that can hold information over lengthy periods of time.

Question 6

Information in long-term memory is primarily stored through

- A. the visuospatial sketchpad.
- B. semantic encoding.
- C. the phonological loop.
- D. repetition.

Question 7

Long-term memory has _____ duration and _____ capacity.

- A. limited; limited
- B. unlimited; limited
- C. limited; unlimited
- D. unlimited; unlimited

Question 8

Farah was asked to learn a list of 20 biological terms. She was only able to recall the first 3 and the last 4 terms immediately after hearing the list.

This is most likely an illustration of

- A. the forgetting curve.
- B. the serial position effect.
- C. a lack of consolidation.
- D. a lack of context cues.

Question 9

You find an old cabinet at a garage sale.

The component of working memory that makes the decision to buy the cabinet is the

- A. visuospatial sketchpad.
- B. semantic network.
- C. central executive.
- D. phonological loop.

Question 10

In terms of the semantic network theory, the _____ the link between nodes, the _____ the concept is to recall when the network is activated.

- A. shorter; easier
- B. shorter; harder
- C. weaker; easier
- D. more meaningful; harder

Question 11

Kate's memory of how to swim is a _____ memory, whereas her memory of her first swimming race is a _____ memory.

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

Question 12

Declarative memory consists of

- A. episodic and semantic memories.
- B. semantic and procedural memories.
- C. episodic and procedural memories.
- D. echoic and iconic memories.

Question 13

According to the decay theory of forgetting

- A. early memories are lost because of competition from the many subsequent memories formed.
- B. the right cues for retrieval are lost over time.
- C. the rate of forgetting increases with age.
- D. a memory is lost because its physical trace fades.

Question 14

Proactive interference is the term used when

- A. previously learnt information makes it difficult to remember new information.
- B. new information makes it difficult to remember previously learnt information.
- C. a head injury makes it difficult to remember information learnt after the injury.
- D. a head injury causes information known before the injury to be forgotten.

Question 15

Arthur is giving a number of presentations to different companies this week. Each presentation consists of different material that he needs to learn. He has thoroughly revised the material for tomorrow's presentation and it is now 9.30 pm.

His best approach for remembering the material for tomorrow's presentation is to

- A. go to sleep for the rest of the night.
- B. watch his favourite TV comedy.
- C. prepare for another presentation that consists of similar material.
- D. prepare for another presentation that consists of very different material.

Question 16

Fred suffered a stroke.

The forgetting caused by Fred's stroke is an example of

- A. an organic cause of forgetting.
- B. motivated forgetting.
- C. decay theory.
- D. old age.

Question 17

Jenny had a brain injury two years ago. She now finds that although she remembers and recognises her old friends, she cannot remember people she has met since the injury.

She is most likely suffering from

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

Question 18

Matilda is 75 years of age. She is fit and healthy and is not suffering from brain disease or injury.

Over the last few years, Matilda has most likely

- A. performed more poorly on recognition tasks than previously.
- B. found it difficult to learn new material.
- C. found it difficult to remember procedural memories.
- D. not experienced large memory losses.

Question 19

According to the forgetting curve, the rate of forgetting is typically

- A. steady over a two-week period.
- B. rapid at first, then followed by a gradual period of steady decline, and finally a stable period where little forgetting occurs.
- C. a stable period where little forgetting occurs, followed by rapid forgetting.
- D. steady for the first 20 minutes, then rapid for the next 8 hours, then a gradual period of steady decline.

Question 20

George taught his class how to remember key people in Australian history by visually associating each person with a landmark in the classroom.

This mnemonic technique is known as

- A. narrative chaining.
- B. an acronym.
- C. method of loci.
- D. acrostic.

Question 21

Jan needs to remember the items on her shopping list.

She is most likely to remember them if she

- A. repeats the names of the items over and over.
- B. remembers the total number of items she needs to buy.
- C. makes up a story containing the items, and recalls the story when she is at the supermarket.
- D. pins a list of the items on a board in her kitchen and looks at it often.

Question 22

Marika carries out an experiment on memory. She performs a test of significance and finds that $p < 0.05$.

This means that

- A. there is a less than 5% chance that the results are due to chance.
- B. there is a greater than 5% chance that the results are due to chance.
- C. less than 5% of the results are due to chance.
- D. more than 5% of the results are due to chance.

AREA OF STUDY 2 – LEARNING

Question 23

Behaviour due to maturation may be said to be

- A. unlearned.
- B. learned through observation.
- C. learned through trial and error.
- D. a reflex action.

Question 24

Classical conditioning could easily account for how a young child might learn to

- A. walk.
- B. feed himself.
- C. pick up his toys.
- D. fear going to school.

Question 25

In classical conditioning, a conditioned response is

- A. an unlearned reaction to a stimulus.
- B. a learned reaction to a stimulus.
- C. a stimulus that evokes a response.
- D. a previously neutral stimulus that has acquired the capacity to evoke a learned response.

Question 26

Which of the following statements is correct for both classical conditioning and operant conditioning?

- A. both require reinforcement to be given before the desired response
- B. both require reinforcement to be given each time after the desired response
- C. both involve only voluntary responses
- D. both can produce stimulus generalisation and stimulus discrimination

Question 27

Last year Leah went to a psychologist and was cured of her dog phobia. She was able to see a dog without feeling afraid. Yesterday, however, while jogging in the park, she was overcome with a feeling of fear when she saw a woman walking towards her with a dog on a leash.

Apparently Leah's dog phobia

- A. showed spontaneous recovery.
- B. had not been extinguished after all.
- C. showed stimulus discrimination.
- D. showed stimulus generalisation.

Question 28

By today's standards, Watson and Rayner would not meet ethical requirements in their experiment on 'Little Albert' because

- A. an infant was the participant.
- B. they did not inform Little Albert's mother about the nature of the experiment.
- C. they caused distress to the animals they used.
- D. they generalised Little Albert's fear response.

The following information relates to Questions 29, 30 and 31.

When Elijah was a child he spent many happy weekends with his grandmother and they had lots of fun baking scones together. Now whenever Elijah smells freshly baking scones he feels happy.

Question 29

The smell of scones is

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

Question 30

The feeling of happiness when Elijah smells the scones is

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

Question 31

Having fun while baking scones with his grandmother is

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

Question 32

One of the differences between taste aversion and classical conditioning is

- A. taste aversion can be important for survival, whereas classical conditioning is not.
- B. taste aversion is an active process, whereas classical conditioning is passive.
- C. taste aversion will become extinct after only one trial without the unconditioned stimulus, whereas classical conditioning requires repeated trials.
- D. taste aversion can involve a lengthy time lapse between the unconditioned stimulus and the unconditioned response, whereas classical conditioning usually involves a very short time lapse.

Question 33

Gemma enjoys playing with her grandmother's dog. However, Gemma avoids going near her neighbour's dog and she refuses to play with him. The neighbour's dog barked and frightened Gemma on a couple of occasions earlier this year.

Gemma's behaviour demonstrates

- A. extinction.
- B. spontaneous recovery.
- C. discrimination.
- D. generalisation.

Question 34

In Pavlov's experiments, the dog salivated to the sound of a bell.

This indicated that the neutral stimulus had become

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

Question 35

According to Pavlov, during acquisition in classical conditioning

- A. the neutral stimulus is paired with the unconditioned stimulus.
- B. the neutral stimulus is paired with the neutral response.
- C. the unconditioned stimulus is paired with the conditioned response.
- D. the unconditioned stimulus is paired with the unconditioned response.

Question 36

An association between a stimulus and a response is strengthened when the response to the stimulus produces satisfying consequences.

This principle is known as

- A. learning set.
- B. the law of effect.
- C. one-trial learning.
- D. observational learning.

Question 37

Edward L Thorndike used the term _____ to explain learning that was essentially random.

- A. operant conditioning
- B. learning set
- C. vicarious learning
- D. trial and error learning

Question 38

Skinner demonstrated that organisms tend to repeat responses that are followed by favourable consequences.

Skinner termed these favourable consequences

- A. unconditioned stimuli.
- B. rewards.
- C. reinforcements.
- D. learning sets.

Question 39

The Skinner box is

- A. commonly known as the Puzzle Box.
- B. a chamber in which dogs are taught to salivate at the sound of a bell.
- C. a chamber in which animal responses can be recorded and the consequences can be systematically controlled.
- D. a cage in which animals transfer information from previous learning when solving a new problem.

Question 40

Stimulus discrimination is said to occur if the learner

- A. responds to the target stimulus but not any other stimulus.
- B. responds to both the target stimulus and another stimulus.
- C. stops responding to the target stimulus if it is no longer reinforced.
- D. responds in a way that results in the removal of an unpleasant stimulus.

Question 41

Abby works for a book distributor. She gets paid each time she sells her tenth book.

This is an example of a

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

Question 42

Which of the following is seen as discouraging bad behaviour instead of encouraging positive behaviour?

- A. positive reinforcement
- B. trial and error learning
- C. negative reinforcement
- D. punishment

Question 43

Bandura is best known for studying the influence of observing the consequences of a model's behaviour on the learning of

- A. cooperative behaviour in children.
- B. aggressive behaviour in children.
- C. cooperative behaviour in adults.
- D. aggressive behaviour in adults.

Question 44

Which of the following best illustrates the use of a learning set?

- A. You find it difficult to understand your friend's point of view because your own opinion is set.
- B. You find it difficult to play netball because you are used to playing basketball.
- C. You have learnt a formula which is now set in your memory.
- D. You are learning how to make a model according to a set of instructions.

SECTION B – Short answer questions**Instructions for Section B**

Answer **all** questions in the spaces provided.

AREA OF STUDY 1 – MEMORY**Question 1**

Typically the capacity of short-term memory is in the range of _____ items of information. In short-term memory, grouping individual items of information together and remembering them as a group is known as _____.

2 marks

Question 2

Students in Year 12 at a secondary college were taken to a local cinema to watch a short film. All students were tested at the end of one week to see how much of the film they remembered.

Groups A and B were taken back to the cinema to be tested. Groups C and D were tested at school.

Groups A and C were asked to identify certain details of the film when the teacher presented them with a list of possibilities.

Groups B and D were asked to describe all the details they could remember from the film.

A summary of this procedure is in the table below.

	Where tested	Form of testing
Group A	Cinema	Identify details from a list
Group B	Cinema	Describe details as remembered
Group C	School	Identify details from a list
Group D	School	Describe details as remembered

Assuming that individual skills of students did not affect the results, which group would be expected to remember the most events from the film? Using psychological terms, explain your answer.

3 marks

Question 3

At the beginning of the year, a Psychology class was asked to learn the definitions of 10 terms relating to tropical plants. None of the students had a knowledge of, or interest in, tropical plants. The time it took to learn all 10 terms was noted for each student. At the end of the year these same 10 terms were presented to the students and they were asked to learn the definitions again. It was found that students learnt the definitions more quickly this time and the teacher calculated a savings score.

In this situation, define savings score and write the formula that the teacher would use to calculate the savings score.

Definition _____

Formula _____

2 marks

Question 4

Explain the role of echoic memory in assisting us to hear sounds as meaningful words rather than a jumble of unrelated sounds.

2 marks

Question 5

Describe **one** way that you could use **maintenance** rehearsal and **two** ways you could use **elaborative** rehearsal in your VCE Psychology class.

Maintenance rehearsal

1. _____

Elaborative rehearsal

1. _____

2. _____

3 marks

Question 6

Mark was in a serious car accident, although he was not injured. In the days following the accident, he could not help thinking about it over and over. In terms of the consolidation theory, explain why Mark is **able** to remember details of the accident in six weeks time.

2 marks

AREA OF STUDY 2 – LEARNING

Question 7

What is the difference between a reflex action and a fixed action pattern?

2 marks

Question 8

Gayle and Luke argued loudly because they both wished to play with the same toy. The noisy argument annoyed their father. Eventually, their father sent Gayle to her room (against her liking) and let Luke happily play with the toy. The noise stopped, which pleased their father.

a. In terms of operant conditioning, state what type of consequence was received by

i. Gayle _____

ii. Luke _____

iii. Gayle and Luke’s father _____

1 + 1 + 1 = 3 marks

b. Based on the principles of operant conditioning, what is Gayle and Luke’s father likely to do when this situation occurs again? Explain your answer.

2 marks

Question 9

James used to enjoy his job working in an office. However, for some time, James has been constantly criticised by his supervisor. James now feels anxious whenever he arrives at work.

- a. Name the type of conditioning that has caused James to be anxious whenever he arrives at work.

1 mark

James has started to take sick days to avoid the anxiety. The number of sick days he has taken in the last couple of months has increased. Eventually James telephones his workplace to say he is sick and will not be at work for a week.

- b. What type of reinforcement has occurred to encourage James to take the week's sick leave? Explain your answer.

2 marks

James returns to work after a week at home with no anxiety. Immediately upon arrival at work, he feels anxious.

- c. Is feeling anxious upon his arrival at work an example of spontaneous recovery? Explain your answer.

2 marks

Question 10

Motivation is one of the processes involved in observational learning.

Use an example to explain the process of motivation.

2 marks

AREA OF STUDY 3 – RESEARCH INVESTIGATION

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

A researcher asked all the first year Psychology students (100 males and 100 females) from Kookaburra University to participate in a study. Students were offered extra marks in their Psychology final score if they agreed to participate.

Of the 200 students, 40 volunteered for the study (20 males and 20 females). The researcher wanted to investigate whether the memories of first year Psychology students at Kookaburra University were increased by sugar intake.

Prior to the study, informed consent was given and all participants were asked to memorise a list of 20 words (List A). They were then tested on their recall of the words.

The researcher then divided the participants into two groups. For convenience she put the 20 female volunteers into one group (Group 1 – sugar group) and the 20 male volunteers into another group (Group 2 – no sugar group).

Group 1 (sugar group) was given a drink containing sugar. Group 2 (no sugar group) was given a drink that did not contain sugar.

All participants were asked to memorise a different list of 20 words (List B). They were tested again on their recall of the words.

The mean difference in the recall of words across the two lists was calculated. The results are presented in the table below.

	Mean number of words recalled before drink consumption (List A)	Mean number of words recalled after drink consumption (List B)	Mean difference of number of words recalled before drink consumption (List A) and after drink consumption (List B)
Group 1 (sugar) N = 20	15.3	17.6	2.3
Group 2 (no sugar) N = 20	14.9	15.4	0.5

The researcher set a level of significance at 0.05.

A test of significance was calculated and $p < 0.05$.

Participants were debriefed after the study.

Question 11

Write an appropriate aim for this study.

1 mark

Question 12

Write an appropriate operational hypothesis for this study.

2 marks

Question 13

Name the independent variable and the dependent variable in this study.

Independent variable _____

Dependent variable _____

2 marks

Question 14

Identify the population and the sample in this study.

Population _____

Sample _____

2 marks

Question 15

Were the participants in this study randomly selected? Explain your answer.

1 mark

Question 16

Name the experimental research design that was used in this study.

1 mark

Question 17

What is the purpose of List A?

1 mark

Question 18

The researcher used a single-blind procedure. What does this mean for this study?

1 mark

Question 19

Name and define another measure (descriptive statistic) that the researcher could calculate to help summarise the findings for each of the four sets of results.

2 marks

Question 20

Was there a statistically significant difference between the two groups of participants?

1 mark

Question 21

Can the results be generalised to the population? Fully explain the reasons for your answer.

2 marks

Question 22

What ethical standard or consideration was breached by the researcher? Explain how it was breached.

2 marks