

Student name

PSYCHOLOGY

Unit 4

Trial Examination

QUESTION AND ANSWER BOOK

Total writing time: 1 hour 30 minutes

Structure of book

Section	Number of questions	Number of marks
A	45	45
B	15	45
	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 calculators are allowed in this examination.

Materials supplied

- Question and answer book of 25 pages with a detachable answer sheet for multiple-choice questions inside the front cover.

Instructions

- Detach the answer sheet for multiple-choice questions during reading time.
- Write your **name** in the space provided above on this page and on the answer sheet for multiple-choice questions.
- All written responses should be in English.

At the end of the examination

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

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PSYCHOLOGY

Unit 4 Trial Examination

MULTIPLE CHOICE ANSWER SHEET

STUDENT NAME:	
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INSTRUCTIONS:**USE PENCIL ONLY**

- Write your name in the space provided above.
- Use a **PENCIL** for **ALL** entries.
- If you make a mistake, **ERASE** it – **DO NOT** cross it out.
- Marks will **NOT** be deducted for incorrect answers.
- **NO MARK** will be given if more than **ONE** answer is completed for any question.
- Mark your answer by placing a **CROSS** through the letter of your choice.

1.	A	B	C	D
2.	A	B	C	D
3.	A	B	C	D
4.	A	B	C	D
5.	A	B	C	D
6.	A	B	C	D
7.	A	B	C	D
8.	A	B	C	D
9.	A	B	C	D
10.	A	B	C	D
11.	A	B	C	D
12.	A	B	C	D
13.	A	B	C	D
14.	A	B	C	D
15.	A	B	C	D

16.	A	B	C	D
17.	A	B	C	D
18.	A	B	C	D
19.	A	B	C	D
20.	A	B	C	D
21.	A	B	C	D
22.	A	B	C	D
23.	A	B	C	D
24.	A	B	C	D
25.	A	B	C	D
26.	A	B	C	D
27.	A	B	C	D
28.	A	B	C	D
29.	A	B	C	D
30.	A	B	C	D

31.	A	B	C	D
32.	A	B	C	D
33.	A	B	C	D
34.	A	B	C	D
35.	A	B	C	D
36.	A	B	C	D
37.	A	B	C	D
38.	A	B	C	D
39.	A	B	C	D
40.	A	B	C	D
41.	A	B	C	D
42.	A	B	C	D
43.	A	B	C	D
44.	A	B	C	D
45.	A	B	C	D

SECTION A – Multiple choice questions**Specific instructions for Section A**

Section A consists of 45 questions, each with four possible answers. Only **one** answer in each question is correct. Select the answer you believe is correct and indicate your choice on the multiple choice answer sheet by crossing the corresponding box.

If you wish to change an answer, erase it cleanly and cross your new choice clearly in the appropriate box. **No** mark will be given if more than one answer is completed for any question.

You should attempt **all** questions.

Each question is worth **one** mark. Marks are **not** be deducted for incorrect answers. The questions are arranged in the three areas of study for this unit. When you have completed the answers for one area of study, go straight onto the next area of study.

AREA OF STUDY 1 – Memory**Question 1**

Melinda is trying to learn the names of the athletes who won Olympic Medals at Athens. Her friend, Gaby read the list of names five times. Melinda can only recall one name which she tells her friend. Since the method of learning and recall both involve sound, her failure to recall the names could involve

- A. problems with encoding.
- B. problems in storage.
- C. problems in retrieval.
- D. all of the above.

Question 2

Amy is asked to give the names of the seven dwarfs from the Walt Disney movie “Snow White and the Seven Dwarfs”. She is allowed to give them in any order. This is an example of

- A. free recall.
- B. cued recall.
- C. serial recall.
- D. episodic recall.

Question 3

Dan is in Year 9. In term one, he learned the names of the first 30 elements of the periodic table. It took 4 hours. For the exam at the end of the year, he relearns them. It takes him 1 hour to get them correct. His savings score is

- A. 25%
- B. 50%
- C. 75%
- D. 100%

Question 4

Sperling used a machine to show three rows of four letters for a very short period of time. We now know from this experiment and other similar experiments that information in visual sensory memory

- A. can all be retained by some people who have photographic memory.
- B. is limited to a few pieces of information.
- C. is lost unless we attend to it.
- D. varies considerably from person to person.

Question 5

Brian was introduced to all the members of his basketball team. He played only three matches before injuring his shoulder so he stopped playing. He met one of the team at a local shopping centre. He could no longer remember the player's name. Playing in a basketball team is acting as a _____ cue for recalling the player's name.

- A. state dependent
- B. procedural memory
- C. context dependent
- D. episodic

Question 6

Judd and John were talking about mnemonics, when John said, “Can you remember the name of last year’s Melbourne Cup winner? I know it started with “M” and the owner made it up by combining the names of women that worked for him. I find it so annoying when you can’t remember easy stuff like this.”

Judd replied, “I can’t remember the women’s names but I think the horse was called Makbe Diva.”

John’s memory failure is an example of

- A. forgetting due to poor encoding.
- B. interference.
- C. cue based decay of information.
- D. tip of the tongue phenomenon.

Question 7

The forgetting curve is based on experiments performed by Ebbinghaus. He tested himself using lists of three letter nonsense syllables. Nonsense syllables were used because

- A. they were simple to produce and thus simple to store in long term memory.
- B. he had used them before and found that they produced reliable results.
- C. they could be chunked together in meaningful ways and thus make forgetting more difficult.
- D. he wanted to examine memory processes without the interference of prior experience.

Question 8

Alzheimer’s disease is very hard to diagnose in its early stages. Amongst the first signs of Alzheimer’s disease is

- A. the inability to manage finances effectively.
- B. getting lost in public places (for example, shopping centres).
- C. the inability to remember early incidents in autobiographical memory.
- D. withdrawal from social activities.

Question 9

Freud suggested that some defence mechanisms can cause memory loss especially of traumatic experiences.

This form of memory loss is called

- A. purposeful forgetting.
- B. repression.
- C. regression.
- D. ego maintenance.

Question 10

Jenny listened to a list of 16 words and was immediately asked to recall them in order. In general, she is most likely to have trouble remembering the _____ of the list.

- A. middle
- B. start
- C. end
- D. second half

Question 11

Sam has anterograde amnesia. Damage to which part of the brain could cause such a condition?

- A. thalamus
- B. occipital lobe
- C. hippocampus
- D. corpus callosum

Question 12

Chunking assists _____ memory.

- A. long term
- B. short term
- C. sensory
- D. procedural

Question 13

Quartemain, McEwen and Azmita (1972) tested depressed patients after they had received ECT (electroconvulsive therapy) on a Monday. They were tested Tuesday, Wednesday and Thursday. On Tuesday and Wednesday, they could not remember anything about their life on Monday. On Thursday, more than half could remember what they ate, the television programs they watched and the events before the ECT treatment on Monday. This study creates problems for the _____ theory of forgetting.

- A. semantic network
- B. retrieval failure
- C. interference
- D. consolidation

Question 14

The words EFTPOS and QANTAS are examples of which type of mnemonic?

- A. acrostics
- B. acronyms
- C. abbreviations
- D. method of loci

Question 15

Senkfor & Van Petten (1998) tested elderly participants and university students in the following way. One group of elderly participants and students listened to a woman reading out 50 words. The same woman then read from a list of 100 words (50 words from the old list and 50 new words). Participants had to indicate whether they recognized the words.

The other group of participants also had the same woman read out the same 50 words. However a male read out the second list of 100 words. Figure 1 shows the results of the experiment.

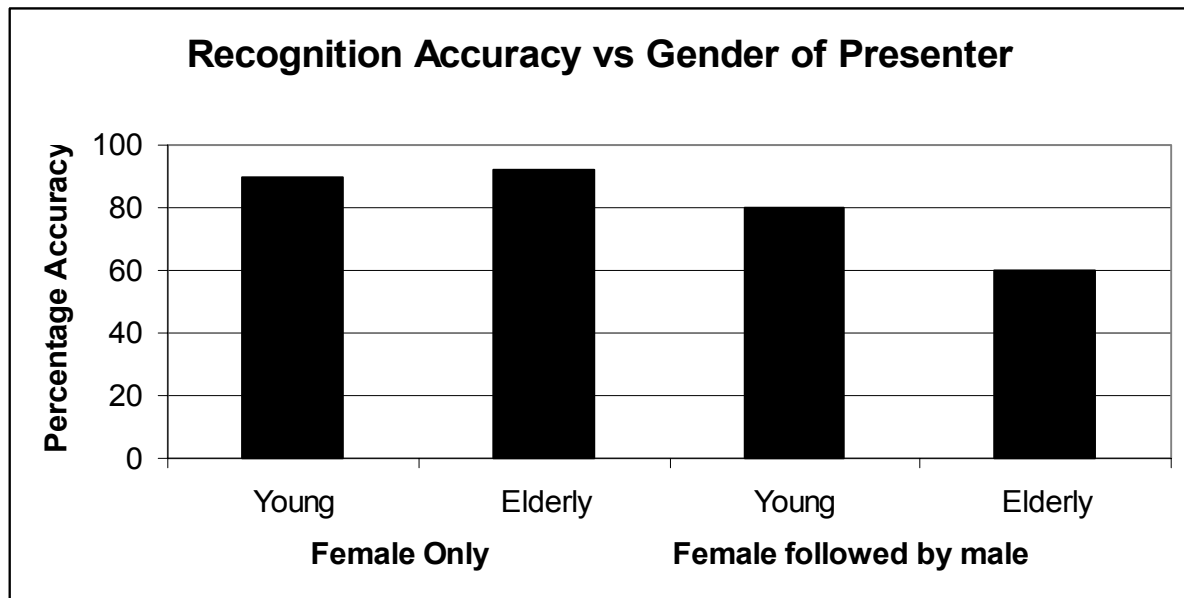


Figure 1.

This study is interesting because

- A. other studies have shown that the elderly can usually recognize material as well as the young.
- B. other studies have shown that verbal fluency improves with age and the young perform poorly on verbal tasks.
- C. other studies have shown that a male voice is better for conveying information. This is the reason most newsreaders are male.
- D. other studies have shown recognition improves with age.

AREA OF STUDY 2 – Learning**Question 16**

Which of the following is specifically excluded from the definition of learning?

- A. Changes in mental processes that are not accompanied by changes in behaviour.
- B. Changes in behaviour due to maturation.
- C. Changes in mental processes or behaviour that take place outside of the classroom.
- D. Changes in behaviour that last for only a few years.

Question 17

Classical conditioning can be defined as a process of

- A. acquiring a phobia.
- B. one-trial learning.
- C. acquiring a food aversion.
- D. establishing a connection between two stimuli.

Question 18

In Watson and Rayner's study with little Albert, the conditioned stimulus (CS) was _____ while the unconditioned stimulus (UCS) was _____ .

- A. fear of the white rat; fear of the loud noise
- B. the white rat; the loud noise
- C. fear of the loud noise; fear of the white rat
- D. the loud noise; the white rat

Question 19

Which of the following is an ethical issue associated with Watson and Rayner's study?

- A. Causing distress and exposing the individual to possible harm.
- B. Absence of informed consent.
- C. Absence of right to withdrawal.
- D. All of the above.

Question 20

Fido has frequently been punished by his owner for digging holes in the garden. Fido now only digs when his owner is away. This is an example of _____.

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

Question 21

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

- A. The processes of stimulus generalisation and discrimination occur in classical conditioning but not in operant conditioning.
- B. In classical conditioning, the stimulus is presented after the response; in operant conditioning, it is presented before the response.
- C. In classical conditioning, the learner is relatively passive; in operant conditioning the learner's role can range from passive to active.
- D. In both classical conditioning and operant conditioning, the response which is learned is reflexive and relatively involuntary.

Question 22

Psychologists' advice to parents whose children throw tantrums is to completely ignore the tantrum!

This advice is based on the idea that the child's tantrums will go away

- A. through the process of extinction.
- B. only if the child is punished.
- C. if the child is negatively reinforced.
- D. only when the child grows and matures.

Question 23

Psychologists are concerned that watching too much televised violence may decrease the viewer's emotional response to real violence, as a result of

- A. repetition.
- B. classical conditioning.
- C. habituation.
- D. behaviour modification.

Question 24

Sometimes, something intended to act as a punisher actually functions as a reinforcer. We know this has happened if the “punished” behaviour

- A. decreases in frequency.
- B. stays the same.
- C. becomes generalised to other situations.
- D. increases in frequency.

Question 25

Simone is teaching Jane to play tennis. She starts by reinforcing any attempt Jane makes to swing a racket. Later, she only reinforces swings that connect with the ball. This method illustrates the process of

- A. shaping.
- B. observational learning.
- C. behaviour modification.
- D. higher-order conditioning.

Question 26

Bandura’s “Bobo Doll” experiments demonstrate that

- A. it is not possible to acquire a response without immediately demonstrating that knowledge through performance.
- B. in observational learning, learning occurs directly.
- C. children only model aggression when they see adults being reinforced for aggressive acts.
- D. cognitive processes play an important part in observational learning.

Question 27

According to Bandura, observational learning involves a number of stages, in the following order:

- A. observation, reproduction, memorisation, reinforcement.
- B. motivation, attention, retention, performance.
- C. attention, retention, reproduction, reinforcement.
- D. reinforcement, reproduction, retention, attention.

Question 28

Which of the following is an example of behaviour most likely to be learned through insight?

- A. Learning to behave in culturally appropriate ways.
- B. Learning to fear injections after watching someone else experience pain while having an injection.
- C. Solving a Maths problem, without prior experience of that type of problem.
- D. Learning how to plan and write an essay.

Question 29

In one of Kohler's experiments, Sultan, the chimp, was presented with two hollow bamboo sticks that needed to be slotted together in order to enable him to reach some bananas. Kohler observed that Sultan first played with the sticks, then acted as if he had given up. Then, suddenly, he slotted the sticks together and used them to pull the bananas towards him.

Sultan's initial playing with the sticks demonstrated the stage of insight learning called

- A. insightful experience.
- B. preparation.
- C. incubation.
- D. verification.

Question 30

Which of the following examples best demonstrates learning set?

- A. We all profit from experience.
- B. Harry learned to play the clarinet more quickly as a result of knowing how to play the flute.
- C. Fay's attempt to learn Spanish is impeded by her previous learning of Italian.
- D. Our learning to talk follows a set pattern.

AREA OF STUDY 3 – Research Methods**Question 31**

A researcher finds a correlation of +0.8 between people in happy marriages and high annual income. What can be concluded from this study?

- A. Unhappy marriages usually occur amongst the poor.
- B. Women often pick their husbands based on his earning potential.
- C. High earnings will usually make people happier.
- D. High income people often have happy marriages

Questions 32 to 37 refer to the following information.

Ginkgo Biloba is a commonly sold herb that is supposed to improve memory and brain functioning. It is supposed to open the blood vessels and thus make more oxygen available to the brain.

Dr Pignon decided to test this using year 12 VCE students from Sheridan Secondary College. Dr Pignon gave out consent forms and used the first 50 volunteers in his study. He divided his participants into two groups by picking their names out of a hat. Students in the experimental group were given a tablet containing 60mg of Ginkgo Biloba. After thirty minutes, they were asked to learn 10 nonsense syllables. The control group was given an apparently identical tablet that contained sugar. After thirty minutes, they were also asked to learn the same list of nonsense syllables.

Question 32

The independent variable in this study is

- A. whether or not Ginkgo Biloba has been consumed.
- B. improvement in memory.
- C. performance on a nonsense syllables task.
- D. age of participants selected.

Question 33

The dependent variable is

- A. whether or not Ginkgo Biloba has been consumed.
- B. improvement in memory.
- C. performance on a nonsense syllables task.
- D. age of participants selected.

Question 34

The best operational hypothesis for this experiment is that

- A. improved blood supply to the brain will lead to improved memory powers.
- B. taking Ginkgo Biloba will improve your long term memory.
- C. 30 minutes is needed before memories can be consolidated
- D. the experimental group that takes the Ginkgo Biloba tablets will learn a list of nonsense syllables quicker than the control group that takes a sugar tablet.

Question 35

The design used in this experiment is

- A. independent groups.
- B. matched participants.
- C. correlational.
- D. repeated measures.

Question 36

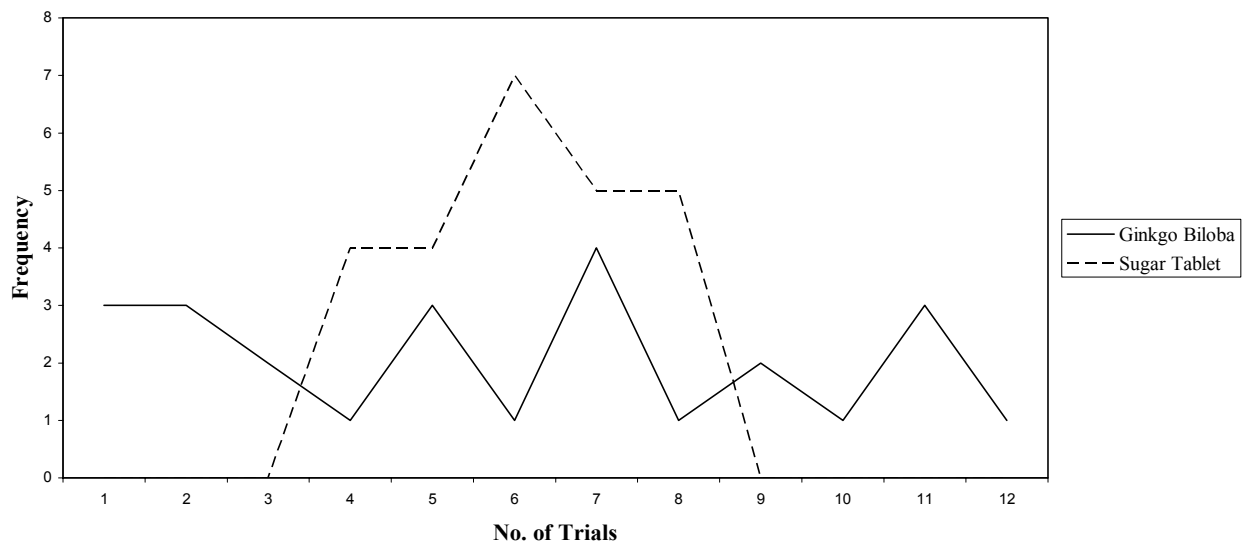
This study could have been improved by

- A. obtaining a sample by random selection.
- B. increasing the dosage of Ginkgo Biloba.
- C. using a single blind study.
- D. using another memory test, for example, digit span.

Question 37

A confounding variable in this study could be

- A. some of the students would be Psychology students so they were familiar with the task.
- B. sugar could also improve memory performance.
- C. both groups of students were tested together. Some students may have expected that the tablet would alter their performance.
- D. intelligence and mental abilities. There could be large individual differences in the students.

Question 38**Number of trials needed to learn a list of nonsense syllables.****Figure 2**

The average number of trials for mastery for the experimental group was 5.88. The average for the control group was 6.12. This difference is not significant.

Dr Pignon's conclusion should be

- A. memory cannot be enhanced by the use of natural supplements.
- B. the Ginkgo Biloba has no real effect on brain functioning.
- C. any beneficial effects of the drug have worn off after thirty minutes.
- D. Ginkgo Biloba appears to have different effects on different people

Question 39

Many studies use inferential statistics because

- A. they allow you to better organize and describe your results.
- B. you can work with a number of variables at the same time.
- C. you can draw conclusions and build theory.
- D. you can correct errors in your experimental method.

Questions 40 to 44 refer to the following information.

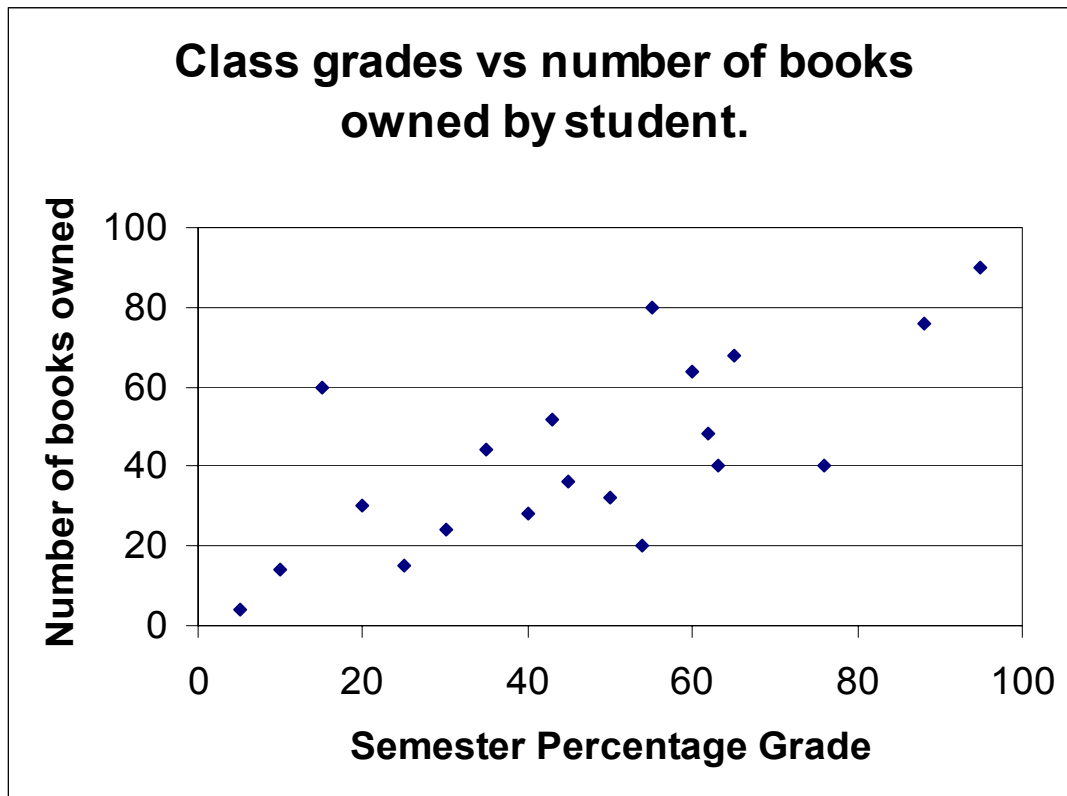


Figure 3

Mrs. Wills, a teacher of grade 6 at a suburban primary school, asked students to collect some information about themselves. Students in the questionnaire listed their pets, their hobbies, their favourite TV shows and how many books they actually owned. The teacher compared the number of books with their semester percentages. The results are shown in the above scattergram.

Question 40

The scattergram in Figure 3 shows that there is

- A. a weak negative relationship between semester grade and number of books owned.
- B. a strong negative relationship between semester grade and number of books owned.
- C. a weak positive relationship between semester grade and number of books owned.
- D. a strong positive relationship between semester grade and number of books owned.

Question 41

Which of the following correlation coefficients most likely corresponds to the data in Figure 3?

- A. +0.7
- B. -0.7
- C. +0.3
- D. -0.3

Question 42

The correlation coefficient is statistically significant. Which of the following is the usual measure of statistical significance?

- A. $p \leq 5$
- B. $p \leq 0.5$
- C. $p \leq 0.01$
- D. $p \leq 0.05$

Question 43

An experimenter effect may have occurred in this study because

- A. teachers would expect the better students to be more literate.
- B. students would know that their teachers value books and so the students would lie about how many books they own.
- C. there is no control on quality. Many of the books may be simple books they had in grade 1 and 2.
- D. teachers' marks on tests are often unreliable.

Question 44

Mrs Wills published her graph in the weekly school newsletter. She wrote "*All parents should encourage reading by giving students access to a wide range of books. This study shows that students with better book access get better grades.*"

The statement in italics is an example of a/an

- A. hypothesis
- B. conclusion
- C. generalisation
- D. statistical proposition

Question 45

Thomas Moriarty believes that most people show passive compliance. That is, they are prepared to accept unreasonable demands or conditions. In a recent experiment at John F. Kennedy Airport, New York (where smoking is prohibited), an accomplice would stand near non smokers and light up a cigarette. The experiment was designed to see if people would act. For example, move away, report the offender to the authorities, or even speak to the individual directly.

This sort of experiment does not comply with the current code of ethics. The aspect of ethics that has been most infringed is

- A. confidentiality
- B. psychological harm to the individual
- C. voluntary participation
- D. the use of deception

END OF SECTION A

SECTION B – Short answer section**Specific instructions for Section B**

There are 15 questions in this section. Answer **all** questions in the spaces provided.

AREA OF STUDY 1 – Memory**Question 1**

What is the normal capacity of working memory? Explain how **chunking** can increase the amount of information stored in working memory.

2 marks

Question 2

There are a number of types of long term memory. What are the key characteristics of **procedural**, **episodic** and **semantic** memory?

i Procedural _____

1 mark

ii Episodic _____

1 mark

iii Semantic _____

1 mark

Question 3

Garth is studying for his Psychology exam. He is trying to remember the order of the nerves along the spinal cord (cervical, thoracic, lumbar and sacral). Explain how he could use **elaborative** or **maintenance rehearsal** to help him learn this information.

2 marks

Question 4

Thomson and Baddeley developed the “silly sentence” test of memory.

Six examples of questions from the silly sentence test.

	Yes	No
1. Jamaica is edible.	—	—
2. London is a place.	—	—
3. Potatoes move around searching for food.	—	—
4. Drills are scientists.	—	—
5. California is in France.	—	—
6. Flies carry disease.	—	—

They found that most participants took a lot longer to process statements 1, 3 and 4.

i What is semantic network theory?

1 mark

ii Why are Thomson and Baddeley’s results consistent with this theory?

2 marks

Question 5

Explain the differences between **proactive** and **retroactive interference**.

2 marks

Question 6

Germany shares a border with 8 countries: Austria, Belgium, Czech Republic, France, Luxembourg, Netherlands, Poland and Switzerland.

Explain how **the method of loci**, **acrostics** and **narrative chaining** could be used to remember these 8 country names.

3 marks

AREA OF STUDY 2 – Learning**Question 7**

State one similarity and one difference between reflex actions and fixed action patterns.

i Similarity _____

1 mark

ii Difference _____

1 mark

Question 8

Using examples, distinguish between positive reinforcement and negative reinforcement schedules.

2 marks

Question 9

Ellie, who is seven, needs to learn to speak louder in class. Her parents and teachers agree to use the technique of token economies to attempt to change her behaviour.

- i Explain what is involved in a token economy and describe how a token economy procedure might be implemented to teach Ellie to speak louder.

3 marks

- ii Token economies are usually associated with the use of behavioural contracts. What might such a contract involve in Ellie's case?

1 mark

Question 10

Jeffrey is playing with his food at the dinner table. His mother asks him to stop playing with his food. When he does not stop, she takes his food away, leaving him hungry all night. Jeff never plays with his food again.

- i What type of procedure did Jeffrey's mother use to change Jeffrey's behaviour?

1 mark

- ii State one likely negative consequence of using this type of procedure.

1 mark

Question 11

As part of their work in Unit 4, Ms Henty's Psychology students are using a computer simulation programme to "train" a virtual rat called "Sniffy" to press a bar to obtain food. The programme enables students to use different schedules of reinforcement.

- i Distinguish between continuous reinforcement and partial reinforcement schedules.

2 marks

- ii What schedule of partial reinforcement is being used by the students in the examples below?

- a) Ben: "Sniffy" gets a pellet of food after exactly 5 presses of the bar.

1 mark

- b) Suzanna: "Sniffy" gets a pellet of food after 15 seconds have passed, no matter how often he presses the bar in the interim.

1 mark

- iii After their rats have learned to press the bar, both students stop giving them food pellets. Whose rat, Ben's or Suzanna's, will continue pressing the bar for a longer period of time after withdrawal of food?

1 mark

AREA OF STUDY 3 – Research Methods

Questions 12 and 13 refer to the following information.

In 2004, there will a Federal Election. Most members of parliament belong to either the Liberal or the Labor Party. These parties conduct political campaigns so that their members are elected. The names of all Australian citizens that are eligible to vote are registered on the electoral rolls.

Question 12

Dr Tweedle is trying to predict the results of the upcoming election. He has access to the electoral rolls and only wants to contact 1000 voters.

- i What are the advantages of random sampling in this situation?

1 mark

- ii What are the advantages of stratified sampling in this situation?

1 mark

Question 13

A key issue in the election has been Australia's involvement in Iraq. Dr Tweedle wants to test whether films or videos can change people's attitudes and hence influence how they will vote.

- i What is the advantage of an experiment over other methods of data collection?

2 marks

- ii Dr Tweedle has been given permission to show Mike Moore's film "Fahrenheit 9/11" for experimental purposes. This film criticizes the American Government and its involvement in Iraq. Australia is an American ally. Complete the blank sections in the following table showing how you would design an experiment to test whether the film "Fahrenheit 9/11" has any influence on attitudes.

Type of Design		
Participants – number and method of selection.	Experimental	Control
Steps in experimental method	Experimental	Control
	1. _____	1. _____
	2. _____	
	3. _____	

4 marks

- iii A major confounding variable in this study is people's political affiliation. That is, do they vote Liberal or Labor?

- a) What is a confounding variable?

- b) How should Dr Tweedle control the effects this variable in his study?

2 marks

Question 14

The Australian Psychological Society (APS) Code of Ethics directs that psychologists must be especially careful if their work uses deception.

What are these obligations? Why is debriefing necessary?

2 marks

Question 15

Many psychological studies involve the use of hormones, neurotransmitters or drugs. These studies often involve **single blind** or **double blind** procedures and the use of **placebos**.

i What are **single blind procedures**?

1 mark

ii What are **double blind procedures**?

1 mark

iii What are **placebos**?

1 mark

END OF EXAMINATION