



VCE PSYCHOLOGY 2005 WRITTEN EXAM 2 UNIT 4

Time allowed: 90 minutes
Total marks: 90

44 Multiple Choice Questions
12 Extended Response Questions

An Answer sheet is provided for section A.
Answer all questions in Section B in the space provided.

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VCE Psychology 2005 Trial Exam Semester 2 Unit 4

Student Answer Sheet

Student Name.....Class.....

Instructions for completing test. Use only an HB pencil. If you make a mistake erase and enter the correct answer. Marks will not be deducted for incorrect answers.

Write your answers to the Short Answer Section in the space provided directly below the question.

There are 44 Multiple Choice questions to be answered by circling the correct letter in the table below.

<i>Question 1</i>	A	B	C	D	<i>Question 23</i>	A	B	C	D
<i>Question 2</i>	A	B	C	D	<i>Question 24</i>	A	B	C	D
<i>Question 3</i>	A	B	C	D	<i>Question 25</i>	A	B	C	D
<i>Question 4</i>	A	B	C	D	<i>Question 26</i>	A	B	C	D
<i>Question 5</i>	A	B	C	D	<i>Question 27</i>	A	B	C	D
<i>Question 6</i>	A	B	C	D	<i>Question 28</i>	A	B	C	D
<i>Question 7</i>	A	B	C	D	<i>Question 29</i>	A	B	C	D
<i>Question 8</i>	A	B	C	D	<i>Question 30</i>	A	B	C	D
<i>Question 9</i>	A	B	C	D	<i>Question 31</i>	A	B	C	D
<i>Question 10</i>	A	B	C	D	<i>Question 32</i>	A	B	C	D
<i>Question 11</i>	A	B	C	D	<i>Question 33</i>	A	B	C	D
<i>Question 12</i>	A	B	C	D	<i>Question 34</i>	A	B	C	D
<i>Question 13</i>	A	B	C	D	<i>Question 35</i>	A	B	C	D
<i>Question 14</i>	A	B	C	D	<i>Question 36</i>	A	B	C	D
<i>Question 15</i>	A	B	C	D	<i>Question 37</i>	A	B	C	D
<i>Question 16</i>	A	B	C	D	<i>Question 38</i>	A	B	C	D
<i>Question 17</i>	A	B	C	D	<i>Question 39</i>	A	B	C	D
<i>Question 18</i>	A	B	C	D	<i>Question 40</i>	A	B	C	D
<i>Question 19</i>	A	B	C	D	<i>Question 41</i>	A	B	C	D
<i>Question 20</i>	A	B	C	D	<i>Question 42</i>	A	B	C	D
<i>Question 21</i>	A	B	C	D	<i>Question 43</i>	A	B	C	D
<i>Question 22</i>	A	B	C	D	<i>Question 44</i>	A	B	C	D

VCE Psychology 2005 Semester 2 Unit 4

Multiple Choice Section

Area of study 1--Memory

Question 1:

As incoming information enters our sensory systems, it is given meaning. This is referred to as:

- A. Organisation.
- B. Selection.
- C. Encoding.
- D. Sensation.

Question 2

Which of the following is **not** true about short term memory?

- A. It is affected by interference
- B. It is affected by interruption
- C. Short term memory permanently stores information
- D. It is also known as “working memory”

Question 3

Hadley is at a party and is introduced to Jim. Later on that evening, he refers to Jim as “Tim”. This is an example of what type of encoding?

- A. Acoustic
- B. Visual
- C. Semantic
- D. It has nothing to do with encoding

Question 4

In reading a book over the holidays, Brendan reads about the Eiffel Tower in Paris. As he has visited this monument, and it is where he proposed to his wife, the **word** Eiffel Tower is meaningful to Brendan. The word “Eiffel Tower” would most likely be encoded:



- A. Acoustically
- B. Semantically
- C. Visually
- D. Cognitively

Question 5

The term “consolidation” means:

- A. the organization of memories during sleep.
- B. the process of memory moving from sensory to short term memory.
- C. giving meaning to information, therefore encoding it more successfully.
- D. physical changes within the brain that allow information to be stored in long term memory.

Question 6

Caitlin is asked to remember each track on the Franz Ferdinand album in correct order. This would be an example of:

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



Question 7

Alex is a witness to a crime. He has been asked to attend a police line up. To test his accuracy, none of the participants in the line up are actually the accused, yet Alex picks out one of the men. This inaccuracy is referred to as:

- A. a false positive.
- B. faulty recall.
- C. a distractor.
- D. consolidation fade-out.

Question 8

The most sensitive measure of memory is:

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

Question 9

Nichole was attempting to remember the name of the man who studied memory using “nonsense syllables”. She knew his name started with an H and that he was born in 1850. When we know something, but can’t immediately say what it is, we are experiencing:

- A. sensory memory.
- B. tip of the tongue phenomenon.
- C. consolidation failure.
- D. a lack of specific cues.

Question 10

The multi-store model of memory would be shown as:

- A. shallow processing → deep processing → consolidation.
- B. short term memory → sensory memory → long term memory.
- C. shallow processing → consolidation → deep processing.
- D. sensory memory → short term memory → long term memory

Question 11

Michael looks at an apple and then shuts his eyes. He sees a fleeting image of the apple in his consciousness. This image is referred to as:

- A. iconic memory.
- B. common memory.
- C. echoic memory.
- D. thinking memory.



Question 12

The image of the apple that Michael retains in his consciousness lasts approximately:

- A. 1-2 seconds.
- B. up to 5 seconds.
- C. 1/10 of a second.
- D. 1/3 to 1/2 a second.

Question 13

Sarah is going to study whether children under 10 years of age have a better visual memory of a playground, than adults over 21 years of age. She is going to write an “operational hypothesis”. This is:

- A. a prediction, to be disproved, that indicates there is no relationship between the variables being studied.
- B. a prediction, that one variable will cause a change in another variable, without indicating the direction of that relationship.
- C. a detailed and defined prediction, about how each variable is measured and the effect it is expected to have on behaviour.
- D. a prediction, that describes the behaviour or characteristics expected by a sample drawn from a larger population.

Question 14

Kerry is studying for her November Psychology exam and is mentally rehearsing the definitions of the words memory, learning and forgetting. In this instance, Kerry is using:

- A. elaborative rehearsal.
- B. self referencing.
- C. consolidation.
- D. maintenance rehearsal.

Question 15

Gilly is at a night club where he meets a very attractive young woman. After spending the night chatting and dancing, Gilly asks for her mobile phone number. The number she gives him is 0321981459. Gilly finds this difficult to remember, so he decides to group the numbers as follows:

0321 981 459

This process is known as:

- A. chunking.
- B. maintenance rehearsal.
- C. grouping.
- D. number rehearsal.

Question 16

Michelle is sitting for her French oral exam. She is asked what her favourite food is. Before answering the question, Michelle prepares in her mind what she is going to say. This area of working memory that stores a limited amount of sound based information is called:

- A. articulatory control system.
- B. echoic memory.
- C. phonological loop.
- D. the central executive.

Question 17

Sara is trying to remember the steps in her mother’s famous Tibetan goat curry recipe. This information would be stored in Sara’s:

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



Question 18

Mr. Stuckey, a year 12 Biology teacher, presents his class with a list of 15 biological terms that he wants his students to remember. He does this by reading each word out with a 2 second gap between each word. Once the list has been read, the students are required to write down as many words that they can recall. They are given as much time as they need. When Mr. Stuckey collects the responses, he finds that most students had a more accurate recollection of the words at the end of the list, followed by those at the beginning of the list. This phenomenon is referred to as:

- A. the serial position effect.
- B. the recency effect.
- C. the primacy effect.
- D. the order effect.

Question 19

In conducting an experiment on memory enhancement, psychologists at the Lovell institute ask Claire, a voluntary participant, to learn the words:

Giant Stumbled Beach Red Lighthouse

Claire learns the above 5 words by placing them into the following short story:

“The giant giraffe stumbled on the rocky beach, as the red waves crashed over the lighthouse”.

Claire has used which form of memory enhancement?

- A. Elaborative rehearsal
- B. Method of Loci
- C. Imagery
- D. Narrative Chaining.

Question 20

Jamie is riding his bike home from school when a dog runs across his path, causing him to crash his bike into a fence. Jamie is taken to the doctor as he has suffered minor head injuries. After talking with Jamie, the doctor realizes that he has lost his memory of events that occurred prior to his head injury. Jamie has suffered:

- A. anterograde amnesia.
- B. organic amnesia.
- C. retrograde amnesia.
- D. procedural amnesia.

Question 21

Shane, sits for his topic test on forgetting and receives a score of 6/20. He is bitterly disappointed and consciously makes an effort to not think about this test result, therefore putting it out of his awareness. Shane has _____ this memory.

- A. repressed
- B. consolidated
- C. suppressed
- D. lost

Question 22

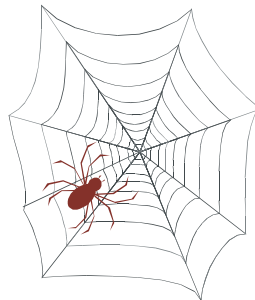
The forgetting curve shown by Hermann Ebbinghaus indicates the amount remembered after varying lengths of time. According to this curve, an individual is likely to forget approximately _____ of information 1 hour after learning has occurred:

- A. 30%
- B. 50%
- C. 70%
- D. Between 80-90%.

Area of Study 2–Learning**Question 23**

Learning can be defined as:

- A. an automatic and involuntary behaviour to a stimulus.
- B. physical growth of the body, brain and nervous system.
- C. a series of movements or behaviours that occur in almost all members of a species.
- D. a relatively permanent change in behaviour due to experience.

Question 24

Brent is working in the garden when he comes across a spider spinning a web. Later that afternoon, while chopping wood, Brent again notices a spider of the same species spinning a web. The notion that all spiders of this species spin a very similar web is due to:

- A. maturation.
- B. a fixed action pattern.
- C. learning.
- D. a reflex action.

Questions 25, 26 and 27 refer to the following information:

Stella is studying classical conditioning at university. For an assignment she has been asked to provide an everyday example of classical conditioning in operation. At home, her dog Cartwright gets very excited whenever he goes for a walk. Stella has noticed that as she approaches the garage, where her dog's lead is kept, that Cartwright becomes extremely agitated. To reduce her dog's excitement, Stella moves the lead into the house. After some time, Stella realizes that as she approaches the garage, Cartwright no longer becomes animated.

Question 25:

_____ was the person who originally conducted experiments on classical conditioning.

- A. Sigmund Freud
- B. Wilhelm Wundt
- C. Ivan Pavlov
- D. William James

Question 26:

In the above scenario, the neutral stimulus would be:

- A. the garage.
- B. Stella.
- C. the walk.
- D. all of the above.

Question 27:

The fact that Cartwright no longer becomes excited as Stella approaches the garage, is referred to as:

- A. extinction.
- B. stimulus generalization.
- C. spontaneous recovery.
- D. acquisition.

Question 28

Luke attends a seafood restaurant with his family to celebrate his 18th birthday. Luke orders garlic prawns with saffron rice for his main meal. Later on that night, Luke experiences severe pains in his stomach and vomits. He spends the next day in bed with nausea and stomach cramps. Three months later, at a friend's BBQ, Luke is served prawns. He immediately feels sick and cannot eat them. Luke is experiencing:

- A. a food allergy.
- B. a dislike for seafood.
- C. reflex conditioning.
- D. taste aversion.

Question 29

Thorndike's "law of effect" states that:

- A. an undesirable behaviour is associated with negative stimuli to try and stop that behaviour.
- B. the probability of a response is altered by the effect that response has.
- C. negative behaviour should be rewarded in order to make the response a positive experience.
- D. punishment can negatively affect learning.

Question 30

Chris is baking a cake for the first time. On his first attempt, Chris burns the cake. On his second attempt, he turns the oven down 10 degrees, but unfortunately the cake still burns. On his third attempt, Chris lowers the oven a further 20 degrees and the cake is cooked perfectly. This method of learning whereby Chris modifies and further explores his options is referred to as:

- A. operant learning.
- B. trial and error learning.
- C. classical learning.
- D. spontaneous learning.

Question 31

Lizzie has a very bad headache, and reaches the stage where she needs to take an aspirin. Taking the aspirin to relieve the pain is a form of:

- A. extinction.
- B. positive reinforcement.
- C. negative reinforcement.
- D. positive extinction.

Question 32

David is traveling to Olympic Park to watch Melbourne Storm play Penrith Panthers. He parks in a one hour parking area. After the game, he returns to his car to find that he has a parking ticket. The parking ticket issued to David is an example of:

- A. a response cost.
- B. negative reinforcement.
- C. non-reinforcement.
- D. punishment.

Question 33

Carly fails to submit her homework. Her teacher is unsure how to punish Carly's behaviour. Skinner's research would suggest that:

- A. punishment should be delayed until the teacher has discussed it with other members of staff.
- B. Carly should be informed of her punishment the following day.
- C. another teacher should conduct the punishment.
- D. Carly should be informed of her punishment as soon as possible.

Question 34

Rory works at Kearney's Newsagency. He delivers papers and is paid \$6.50 for every 100 papers delivered. Which schedule of reinforcement is being applied?

- A. Fixed Interval
- B. Variable Interval
- C. Fixed Ratio
- D. Variable Ratio

Questions 35 and 36 refer to the following information:

Glenn Bennie is representing Australia in the upcoming Commonwealth Games in Greco Roman wrestling. Wrestling students at the Australian Institute of Sport have used footage of Glenn to observe his techniques.

Question 35

Which of the following is **not** a factor of observational learning?

- A. Observers cannot learn unless they pay attention to what is happening around them.
- B. Observers must be capable of reproducing the act.
- C. It is better if the observer does not identify with the model.
- D. Observers will only perform what they have observed if they have some motivation to do so.

Question 36

After watching the footage of Glenn Bennie, the students then mimic his famous "grappling hold".

Which of the following terms best describes copying the behaviour of the model?

- A. Motivational behaviour.
- B. Reproduction.
- C. Copying behaviour
- D. The mimic model

Question 37

Learning set occurs when:

- A. there is the desire to repeat a task
- B. there is the transfer of information from a previous learning situation to a new learning situation
- C. there is an event that closely precedes a response and increases the probability of the response being repeated.
- D. set standards are applied to a learning concept.

Questions 38 and 39 refer to the following information:

Ainslee is scared of the chickens his father breeds, as he was once pecked on his hand as a little child. At age 15, Ainslee fears all types of birds.

Question 38

The fact that Ainslee fears all types of birds as a result of the chickens pecking his hand, is an example of:

- A. spontaneous recovery.
- B. acquisition.
- C. Stimulus discrimination.
- D. Stimulus generalization.

Question 39

If Ainslee only feared the chickens in his father's backyard, he would be experiencing:

- A. spontaneous recovery.
- B. acquisition.
- C. Stimulus discrimination.
- D. Stimulus generalization.

Question 40

Classical conditioning is dependent upon the association between which of the following?

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

Question 41

Nick's cat "Bec" has a habit of scratching people. After many weeks of conditioning, Bec has not scratched anyone for some time. One day Bec suddenly scratches Tom, one of Nick's friends. The term used to describe the reappearance of Bec's actions is:

- A. extinction.
- B. generalization.
- C. counter-conditioning.
- D. spontaneous recovery.

Question 42

Bandura's research which involved the use of Bobo dolls was used to demonstrate which type of learning?

- A. Imitation
- B. Motivational Learning
- C. Modelling
- D. Learning Set

Question 43 and 44 refer to the following information:

While watching the wedding between Prince Charles and Camilla, Karen is upset by the constant interruption of her son Ben. To stop the interruptions, Karen gives Ben money to buy lollies at the Milk Bar. When Ben is watching television with his father, he is very well behaved as he knows the result of interrupting his father is for him to be sent to his bedroom.

Question 43

The result of Karen's action is most likely to be:

- A. Ben will become more interested in the Royal family
- B. Ben will be less likely to disrupt his mother
- C. Ben will increase his disruptions when Karen is watching television
- D. Ben and Karen's relationship will improve

Question 44

That Ben will only interrupt his mother and not his father is an example of:

- A. Learning Set
- B. Stimulus Discrimination
- C. Stimulus Generalisation
- D. None of the above

SHORT ANSWER SECTION

Memory

Question 1

Using the semantic network theory explain how information is organized and retrieved from long term memory.

(4 marks)

Question 2

Explain why relearning is the most sensitive measure of memory.

(2 marks)

Question 3

With the use of examples explain the difference between iconic and echoic memory. According to the multi-store model of memory, where are iconic and echoic memory held?

(3 marks)

Question 4

How many pieces of information can Short Term Memory store?

(1 mark)

Question 5

Paul has been invited into a corporate box at the MCG to watch a match between Carlton and Richmond. During lunch, he is introduced to Nelson who has some excellent business connections. To enhance his chances of remembering Nelson's name, Paul continually uses Nelson's name when talking to others during the next 15 minutes. In this situation, Paul is using elaborative rehearsal.

(a) Name two advantages and two disadvantages of using elaborative rehearsal.

(4 marks)

(b) Which stage of the memory model would elaborative rehearsal be found?

(1 mark)

Learning

Question 6

Place a tick in the appropriate box below which demonstrates the comparison between classical and operant conditioning:

(3 marks)

Nature of Response	Classical Conditioning		Operant Conditioning	
	voluntary	involuntary	voluntary	involuntary
Timing of reinforcement	Occurs before response	Occurs after response	Occurs before response	Occurs after response
Role of Learner	Active	Passive	Active	Passive

Question 7

Popular Australian cult band “Frankie and the Falcons” rhythm guitarist Big D recently tried bass guitar for the very first time. To Big D’s surprise, he found it very easy to play the bass guitar.

- (a) With regards to learning set, what is the term used to explain the ease in which he changed from rhythm guitar to bass guitar?

(1 mark)

- (b) Explain why Big D would find the bass guitar easy to play.

(2 marks)

Question 8

With the use of one example for each, explain the difference between punishment, negative reinforcement and positive reinforcement.

(3 marks)

Question 9:

Explain, using examples, how the concepts of stimulus discrimination and stimulus generalization differ between classical and operant conditioning.

(4 marks)

Question 10:

List two key factors associated with one trial learning.

(2 marks)

Research Investigation

Question 11

At Esdaile University, scientists are developing a lotion (Hair Today) designed to re-grow hair which has been lost as a result of baldness. Two groups of participants wishing to re-grow their hair are used. The participants are randomly designated to one of two groups. Group A receives the experimental lotion containing the active ingredient for hair growth, while Group B unknowingly receives a lotion which does not contain the active ingredient. Participants are required to use the lotion twice a day over the next month. Participants are required to photograph their scalp once a week to determine hair growth. After statistical analysis of the photographs, Group A obtained a P value of .01, while Group B obtained a P value of .09.



- (a) Explain why participants are **randomly** allocated to each of the two groups.

(2 marks)

- (b) What would be the research names given to both Group A and B?

(2 marks)

- (c) The lotion without the active ingredient for hair re-growth given to group B is referred to by what name, and briefly explain its purpose.

(2 marks)

- (d) What is a P value, and explain whether the P values obtained in the above experiment indicate that the lotion is successful?

(2 marks)

Question 12

In a recent study, Blogg and Funnel tested 60 adult males aged between 60 and 65 in a repeated measures design on the affect of red wine on concentration span. Participants were asked to volunteer for one of two groups. Group 1 were given a glass of red wine one hour prior to reading a 300 word article on Ancient cultures, after which they were asked to answer a series of ten questions relating to the article. Group 2, not being given any wine, were asked to read a 500 word article on Medical procedures, after which they were asked to answer a series of 10 questions relating to the article. Blogg and Funnel hypothesised that greater concentration would result in a higher number of correct answers. The mean score for Group 1 was 8 out of 10, whereas the mean score for Group 2 was 4 out of 10.

- (a) What is a repeated measures design?

(2 marks)

- (b) Name one ethical consideration that Blogg and Funnel must take into account when conducting this experiment.

(1 mark)

- (c) Name one extraneous variable that may have occurred during this experiment.

(1 mark)

(d) Provide and explain 4 problems with this experimental design.

(4 marks)

Suggested Answers VCE Psychology 2005 Unit 4

Multiple Choice Section

1 C 2 C 3 A 4 B 5 D 6 B 7 A 8 C 9 B 10 D 11 A 12 D 13 C
14 D 15 A 16 C 17 B 18 A 19 D 20 C 21 C 22 B 23 D 24 B 25 C 26 A
27 A 28 D 29 B 30 B 31 C 32 A 33 D 34 C 35 C 36 B 37 B 38 D 39 C
40 A 41 D 42 C 43 C 44 B

Short Answer Section

Semantic Network Theory suggests that LTM's are organized into groups and categories that have shared meanings, forming overlapping networks. Concepts that have common elements share strong links. Therefore, if memories are similar in meaning there is a shorter chain of association to connect them. When retrieval occurs, if it is near a memory that shares a strong link with another, those memories will also be triggered, which in turn trigger other memories etc.

(4 marks will be awarded for a similar explanation to the one above)

Question 2

Relearning is the most sensitive measure of memory as it goes over information that has already been learned and stored in LTM. This can be shown through the "savings score" which indicates the amount of time saved when information is relearned.

(1 mark to be awarded for definition of relearning and 1 mark for understanding the notion of the savings score)

Question 3

Both iconic and echoic memories are held in sensory memory. (1 mark)

Iconic memory holds visual information, such as the colour of your school uniform, in the form of an icon for around $\frac{1}{3}$ to $\frac{1}{2}$ of a second. Echoic memory holds auditory (sound) information, in the form of an echo for around 3-4 seconds. When you say the word "information" the "in" is held in your echoic memory until you hear "formation". (2 marks for example and definition of each form of memory)

Question 4

STM can store 7 ± 2 pieces of information (1 mark)

Question 5

a) Advantages of elaborative rehearsal include:

- It is active, as it creates links between new information and information already in LTM
- It adds more detail to the new information by using semantic encoding
- Through integrating memories with information already held in LTM, elaborative rehearsal helps to organize new information based on meaning
- Very effective for achieving long-term information retention (2 marks for any two of the above)

Disadvantages of elaborative rehearsal include:

- It takes more time than maintenance rehearsal
- It requires a more conscious effort to recall information previously stored in LTM
- As you are already accessing information in LTM it depends upon your ability to quickly access this specific information
- Difficult to practise in circumstances where information is rapidly changing within STM

(2 marks for any two of the above)

(b) Short Term Memory (Working Memory) (1 mark for either answer)

Question 6

Students need to place ticks in the following boxes:

	Classical Conditioning		Operant Conditioning	
Nature of Response	voluntary	involuntary	voluntary	involuntary
		✓	✓	
Timing of reinforcement	Occurs before response	Occurs after response	Occurs before response	Occurs after response
	✓			✓
Role of Learner	Active	Passive	Active	Passive
		✓	✓	

All 6 correct ticks = **3 marks**

Between 3 and 5 ticks = **2 marks**

Between 1-2 ticks = **1 mark**

Question 7

a) Positive Transfer (**1 mark**)

b) As Big D has already learnt the rhythm guitar, he has a number of the skills required and the basic musical information necessary to make the transfer to the bass guitar easier for him (**2 marks**)

Question 8

Positive reinforcement is where a pleasurable or desirable event follows a response and increases the likelihood of that response occurring again, such as receiving praise after doing well in your VCE exams.

Negative reinforcement also increases the likelihood of a response occurring again, but is the removal/reduction of an unpleasant stimulus, such as using a headache tablet to reduce the headache, resulting in a more pleasant feeling.

Punishment is any event following a response that decreases its likelihood of occurring again, such as not being allowed to go out to a party due to not doing your homework.

(**1 mark** for each definition and an example for each. Total 3 marks)

Question 9

Classical Conditioning

Stimulus Generalisation–This is where stimuli similar to the conditioned stimuli produce the conditioned response (subject is a passive learner). For example, Pavlov’s dog salivating to the sound of a ringing telephone as well as the bell used in the experiment.

Stimulus Discrimination – Is the ability to respond differently to a range of stimuli (subject is a passive learner). For example, Pavlov’s dog salivating only to the sound of Pavlov’s bell, rather than the doorbell, phone ringing or any other bell for that matter.

Operant Conditioning:

Stimulus Generalisation – With operant conditioning it is the tendency to respond to similar stimuli to those events that give a positive reinforcement or reward (subject is an active learner). For example, a student who is rewarded in psychology for doing their homework on time, will also submit their homework on time in all other subjects.

Stimulus Discrimination – With operant conditioning stimulus discrimination means to respond differently to varied stimuli, but the response will become extinguished if no reinforcement is present (this is an active process). For example, a student who is rewarded in psychology for doing their homework on time, will only submit their homework on time to that particular teacher as they are the one who reinforces that behaviour.

(**2 marks** awarded for each of the above explanations and examples. Total 4 marks)

Question 10

The following are factors associated with one trial learning:

- Occurs as a result of classical conditioning
- It only takes one pairing of a neutral stimulus prior to an unpleasant stimulus to form an association between the two
- The time lapse between the neutral stimulus and the UCS in one trial learning is much longer. It could be hours instead of seconds
- One trial learning tends to be persistent even when reinforcement isn't forthcoming
- The learned response is difficult to extinguish
- We tend to learn these responses to stimuli that may do us harm e.g. food

(Any two of the above is awarded **1 mark** for each)

Question 11

- a) Participants are randomly allocated to various groups within an experiment to ensure that all participants have an equal chance of being allocated to either group. (**2 marks**)
- b) Group A – Experimental Group
Group B – Control Group
(Students to be awarded **1 mark** for each)
- c) Placebo. Placebo's work by changing people's expectations about their own emotional, physical reactions etc. These expectancies in turn may influence bodily activities which may in turn have the same desired effect as the lotion being tested. These expectancies need to be eliminated to see whether the lotion itself is responsible for the outcome. (**2 marks**)
- d) A P-value is the probability that the results of a significance test have either occurred due to chance or the independent variable being tested. (**1 mark**)
The standard P-value in determining whether experimental results are statistically significant is $p < 0.05$. As group A obtained a p-value of 0.01 this is below 0.05 therefore can be deemed statistically significant which in turn means the lotion has been successful. (**1 mark**)

Question 12

- a) A repeated measures design is an experiment where the same group of participants make up both the experimental and control groups. (**2 marks**)
- b) Students may list any one of the following:
Must be voluntary
Participants can withdraw at any stage
Participants must be debriefed after the research
Experimenter must protect the physical and psychological welfare of the participants
Informed consent
Experimenters must behave in a professional manner
Confidentiality
1 mark for any of the above
- c). Examples of extraneous variables are as follows:
The style of the red wine may differ between groups e.g. Merlot or Shiraz
Whether the wine was consumed on a full or empty stomach
Prior knowledge relating to the articles read
Time of day
Weather conditions (e.g. temperature)
Whether participants took an interest in the study
1 mark for any example similar to the ones above
- d). Any of the following:
Sample group is too small
Only male participants
Age range too small
Participants volunteered for the groups. They should be randomly allocated
Word length of the articles differed
Subject of articles differed
Any 4 of the above or similar. **1 mark** each.