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PSYCHOLOGY
Unit 4 Trial Examination
SOLUTIONS BOOK

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Use this page as an overlay for marking the multiple choice answer sheets. Simply photocopy the page onto an overhead projector sheet. The correct answers are blank below. Students should have marked their answers with a cross. Therefore, any blank with a cross inside it is correct and scores 1 mark.

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

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

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

SECTION A – Answers to multiple choice questions

Memory		Learning		Research methods	
1	C	16	B	31	D
2	A	17	B	32	B
3	D	18	C	33	A
4	B	19	D	34	C
5	B	20	D	35	A
6	D	21	B	36	B
7	A	22	A	37	C
8	C	23	D	38	B
9	A	24	D	39	A
10	C	25	C	40	C
11	D	26	C	41	C
12	D	27	C	42	C
13	B	28	C	43	A
14	A	29	B	44	D
15	A	30	A	45	A

SECTION B – Answers to short answer section**Question 1**

- Maintenance rehearsal is the simple recitation of material over and over in your head so that it stays in short term memory.
- Elaborative rehearsal involves giving the information meaning. This involves linking it or making associations with material that is already in long term memory.

2 marks

Question 2

- i. Chunking refers to the process of grouping information into larger units that can be remembered as a single unit. This increases the capacity of short term memory.

1 mark

- ii. Step 1: Marianne should ask her sister to repeat strings of numbers or letters of increasing length. She will probably retain about 7 letters or numbers.

Step 2: Marianne should teach her sister to try to group the letters or numbers into two or three chunks. She should now test whether chunking has increased her memory capacity.

2 marks

Question 3

Give one mark for description.

The serial position effect is the tendency, when memorising a list, to recall the first items (primacy effect) and the last items (recency effect) better than the items in the middle of the list.

Give one mark for explanation.

The first presented items have been rehearsed and transferred to LTM. The items at the end are still being held in STM and can be accessed. The items in the middle have been lost because they are not in either store.

2 marks

Question 4

i. Proactive interference.

1 mark

ii. Existing memories (the names of students in 6A) interfere with the formation of new memories. This has occurred because students in grade 6 would not appear much different to students in grade 5 and the two lists have been learnt close together. *Students must indicate that existing memories disrupt the learning of new memories. Answers that mention interference without explaining the proactive part are to be given only one mark*

2 marks

Question 5

Students can make any two of the following points

- Retrograde amnesia involves forgetting events before an incident whilst being able to remember events after the incident.
- Common causes of incidents are blows to the head or car accidents.
- People are often amnesiac about periods of time and not all old memories. For example, they may forget their trip to Europe.
- Retrograde amnesia is more common than anterograde amnesia. This is because anterograde amnesia involves damage to the hippocampus which is deep in the brain.
- In many cases the loss is only temporary.
- Often people cannot remember the accident that caused the amnesia. The brain trauma does not allow the memory to be consolidated.

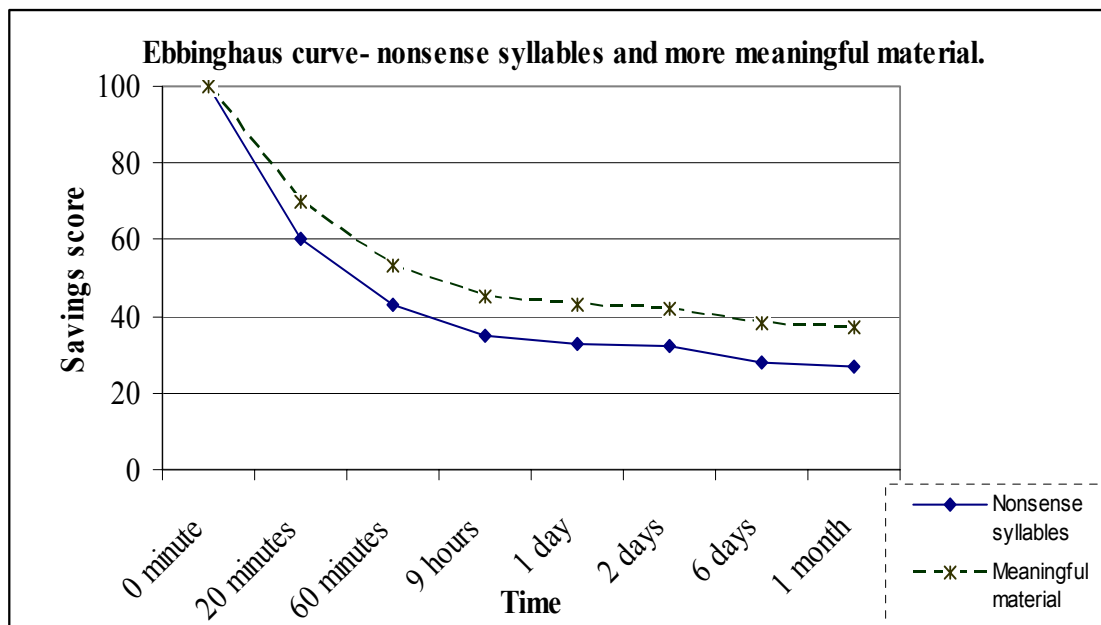
2 marks

Question 6

i. Forgetting curve

ii. The savings score is a measure of how information has been retained in memory from the original time it was learned.

iii. *Meaningful material is easier to retain. The students should draw a graph that is the same shape as the Ebbinghaus curve but higher.*



3 marks

Question 7

Students should be given credit for any two of the following.

- Taste aversions (and other forms of one trial learning [OTL]) are very resistant to extinction.
- OTL only takes one trial. Pavlovian conditioning requires a number of pairings.
- In one trial learning the pairing between CS and UCS can take a long time. For example, someone developing food poisoning may be sick up to 12 hours later. For Pavlovian conditioning the CS should be presented first and the UCS should not be more than 0.5 seconds behind.
- OTLs have specific stimuli. Most animals show stimulus generalisation with Pavlovian conditioning. This is not the case with OTL.

2 marks

Question 8

- i. Stimulus generalization occurs when a stimulus similar to the CS elicits the CR. Usually the closer the new stimulus is to the CS the stronger the response.
- ii. Little Albert was conditioned to fear a white rat. This fear was generalized to other white fluffy objects. Cotton wool balls are white and fluffy.
- iii. *Give students credit for any one of the following.*
 - The key requirement of all psychological research is to do no harm. Watson deliberately set up a procedure which could harm Albert.
 - Informed consent was not given by Albert or his mother.
 - The experiment was not ended when Albert was showing distress.
 - Watson had not devised any procedure or debriefing to fix the distress he had caused.
 - Albert was a particularly vulnerable choice of subject for such an experiment.

3 marks

Question 9

- i. In classical conditioning, the role of the learner is basically passive and they have no control over the learning process. By contrast, operant conditioning requires active participation (the animal must make a response) and thus the animal has some control over the learning process.
- ii. Classical conditioning only uses involuntary responses. Operant conditioning uses both voluntary and involuntary responses.

2 marks

Question 10

Aversion therapy for alcoholics usually involves the pairing of alcohol with nausea. This is done by the patient taking a drug like antabuse which causes nausea if the patient drinks alcohol. The process of classical conditioning is thus-

Before conditioning.

CS: alcohol	leads to	pleasure response (or no response - neutral)
UCS: drug that causes nausea	leads to	UCR: nausea

During conditioning

CS: alcohol	is paired with	
UCS: drug	which results in	UCR: nausea

After conditioning

CS: alcohol	leads to	CR: nausea
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3 marks

Question 11

- i. A learning set is a schema or orientation to a problem developed as a result of previous experience in another similar situation.
- ii. A learning set may improve performance on a new task because it brings a transfer of training. For example, professional cricketers often play baseball over the winter. The batting, catching and throwing improve their cricket skills. A learning set may impede future learning as well which was demonstrated by Luchin with his water jar problem.

2 marks

Question 12

The three key aspects of a token economy are:

1. a patient is rewarded with tokens for appropriate behaviour (this is outlined in table 1).
2. these tokens can be accumulated or recorded so that
3. they can be exchanged for real rewards. This usually means another table is produced showing the exchange rate for different rewards.

3 marks

Question 13

Descriptive statistics allow you to summarise and describe important aspects of the data. Inferential statistics also allow you to make estimates from a sample about the behaviour of a whole population. Using tests of statistical significance allows you to test inferences and build theory.

2 marks

Question 14

- i. repeated measures.
- ii. Since you use the same group for all three forms of remembering you eliminate extraneous participant variables like differences in ability.
- iii. This sort of design often produces order or practice effects. This experiment would probably show interference effects as well since the students are learning three similar lists.

3 marks

Question 15

The independent variable is the hypothesized cause of an effect. The experimenter sets the conditions in the experiment and tries to assess the degree of difference between groups. For example, the teacher in question 14 is examining ways of remembering. Recall, recognition and relearning have been set as the way of remembering. The independent variable is often called the treatment.

The dependent variable is the participants responses. They are used to measure the effect of the independent variable.

2 marks

Question 16

- i. 0.1 indicates a very weak relationship between age and sun smart behaviour.
- ii. Yes. The scatter diagram shows a “V” relationship. Sun smart behaviour is quite high at 12 and then drops at just over 14. As children approach 18 it returns to being quite high.
- iii. Correlation coefficients are based on an assumption that the relationship is a simple straight line. If the variables have a more complex pattern of relationship, the coefficient will not be accurate.

3 marks

Question 17

Students should be given credit for any two of the dot points.

The overriding consideration of all psychological research is to do no lasting harm. This principle has been maintained. In fact people in the experimental group are slightly better off. Nevertheless most ethical principles have been breached.

- voluntary participation. People were not informed that they were in a study.
- Informed consent. There was no written consent for the participants.
- Withdrawal rights. Participants were not given the option of withdrawing.
- Deception. Deception has been used without debriefing the participants after the study.

Confidentiality was retained as there were no records kept outside the gender of the participant and a tick indicating they helped the stooge.

2 marks

Question 18

- i. That people are more likely to assist a person who has dropped her papers if they have recently had a little piece of good luck (finding a 50 cent coin).
- ii. The presence or absence of helping behaviour depends on the context and how the participants see their current situation.
- iii. People who help others usually feel “good” within themselves. **OR** Helping is a reciprocal behaviour, people will only assist others if they think that at another time they will also be assisted.

3 marks