

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

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

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

SECTION A - Multiple-choice questions

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

SECTION B - Answers to short answer section.**Question 1**

Alzheimer's disease causes a disturbance in memory functioning. The main areas of the brain that are affected are the hippocampus and the midbrain.

Question 2

- Steve has organized the words into meaningful groups. For example, his first group is animals: tiger, cat, lion, etc. This shows that they are probably stored with some semantic meaning as well.
- For this task, Steve needs to use declarative memory. In particular, he would use semantic memory more than episodic memory.

Question 3

- Savings score = $\frac{(\text{time for original learning}) - (\text{time for relearning})}{(\text{time for original learning})} \times 100$

$$= \frac{(120) - (30)}{120} \times 100 = 75\%$$

- Motivated forgetting occurs when there are anxiety provoking or traumatic memories. For example, a person may forget most of the circumstances of a car accident because it evokes traumatic memories. Freud maintains that repression keeps these memories in the unconscious.

Question 4

The method of loci depends on associating items with a sequence of locations. Images are formed that link the items to be remembered with the locations. The person then retraces their steps through the locations to recover the items. If Shirley has a map of “Middle Earth” it is easy to identify locations where key things happen in the film. She can have several paths around the map for the different characters and their adventures.

Question 5

- a. Chunking is the process of combining smaller bits of information into larger, more meaningful units.
- b. This increases the amount of information that can be stored in STM. Typically STM has a capacity of 7 items. It can hold more if those 7 items consist of chunks.

Question 6

Motivation: Older people probably lack the motivation to learn nonsense syllables, number series or word lists that psychologists tend to use to measure memory. Since they do not try as hard as young people, their performance is not as good as young people.

Loss of confidence: As people get older they lose confidence in their ability to remember. This means that they either avoid the task or use other aids to help them remember.

Central nervous system functioning: As people get older the central nervous system slows down. This means that the elderly cannot process information as quickly as they once could.

Question 7

precedes, follows

Question 8

- a. White laboratory rat. The rat was paired with a loud noise that frightened Little Albert.
- b. *Students need to make any two of the following points.*
 - The procedure had a high risk of causing harm to Albert.
 - Albert was a thumb sucker. This with other responses showed that he was psychologically vulnerable.
 - The experiment should have been stopped once it was clear that Albert was distressed.
 - Informed consent was not obtained from Albert’s mother.

Question 9

Students need to identify any **two** of the following.

- Punishment is aversive and therefore the situation can become negative. For example, if a teacher punishes students, the classroom can become aversive.
- Punishment encourages escape or avoidance behaviour. Children may just avoid the punishing situation and not change their behaviour. For example, if a teacher punishes students for not doing homework, the students may avoid the situation by skipping class or losing their homework books.
- Punishment can lead to greater aggression.
- If children are starved for attention, punishment can actually be reinforcing. The wrong behaviors are then encouraged.

Question 10

Preparation: look at the problem and identify key information. The only letters used are vowels.

Incubation: time out period where information is further processed. There are two As, two Is and two Es. It should be either a O or U.

The insightful experience: where the person sees the link or pattern that allows them to solve the problem. The letters form a trail that goes back and forth.

Verification: does O fit the pattern? Yes. Then the solution is probably correct.

Question 11

Rhesus monkeys were presented with two stimuli (for example, a small green triangle and a large red square). Under one of the stimuli was a food reward. The monkey had to consistently pick the same stimuli regardless of position. The task was changed.

Harlow found that the monkeys developed a learning set where they could learn new tasks more efficiently.

Question 12

- a. The chimps are both on a fixed ratio schedule of reinforcement. They are rewarded once for every 100 responses.
- b. Tim actually eats his rewards. This takes some time. If he has enough food he will no longer be hungry and therefore he will slow down. Tam cannot get any reward until he gets back to his other stage.
- c. Money can be traded for any reward. We can use it for hunger or thirst or any other need. It can also be saved and accumulated and used any time we have a need. Some people just enjoy accumulating money even if it is never used to buy a reward.

Question 13

Inferential statistics allow a researcher to compare the results of his sample with other samples and the whole population. If his results are statistically significant then he can make inferences and test theory.

Question 14

- a. In a matched participant design, you try to get two representative samples that are matched on key characteristics. In this case you would try to match the samples on gender, age and social class. However the researcher is evaluating ways of treating phobias, so you would try to match the samples on the intensity and nature of the phobias. For example, if you had a person with a fear of spiders you would also have another matching person in the other group with a fear of spiders.
- b. The samples are equal on some important characteristics - in this case the intensity and type of phobia.
- c. You can still have biases and your sample may not be representative of the whole population. For example, most clinical data shows that phobias are more common amongst women. The two samples may be excellent for evaluating therapeutic techniques but could be very unrepresentative of the whole population.
- Another problem with this design is that the characteristic may be difficult to measure and thus the two matched groups may be a fiction - you could have achieved a better result using random sampling.

Question 15

A researcher, in the discussion section of a report, should make a judgment as to whether or not the hypothesis has been supported by the study. This is the conclusion. If the study has been successful then it is possible that the findings can be applied in other situations or to a broader group of people. A generalization is where you apply or extend the findings to a new population or situation.

Question 16

- a. *An operational hypothesis must have an independent variable that has an effect on a dependent variable. The independent variable in this study is whether students observed a model or worked from a set of written instructions. Students can predict the opposite of what is shown in the graph. Students who observe a model will produce a better cane basket than students who work from a set of written instructions and diagrams. A better cane basket is measured by the time taken and the quality of the effort (measured by judges rating).*
- b. The differences between the two groups are small and contradictory. There is no inferential statistics that can assist a judgment. Group A produced better quality baskets but they took longer than group B. Modeling appears to have mixed results.

Question 17

*Students only need to identify any **one** of the following. However the second mark is for identifying ways of controlling/eliminating these variables.*

- Time of the week. These are practice exams. The three groups may be doing the exams at different times. To control for this they need to do the exams at the same time.
- Time of the year. Most schools would have SACs and other assessment tasks at this time. Students are going to work much harder on a SAC rather than a practice exam. The only fair gauge is the actual exam itself.
- Nature of the groups. Most students are allocated to classes on the basis of their other subject choices. Three Psychology classes will be three biased samples. You probably need some way of measuring the differences in ability.
- Teacher. If the samples are not equal, you need some way that every teacher teaches all students. You can then assess how effective the teachers are.
- Study habits. Many students would do their revision and study over the term three holidays. Most students would be ill-prepared at this time.

Question 18

- a. No. In random sampling, every member of the population has an equal chance of being selected in the final sample. The customers of a particular computer store are likely to constitute a biased sample. Randomly picking from a biased sample will not compensate for the original bias.
- b. The psychologist would need to explain to participants that he had obtained their names from the store and that participation was voluntary. He would need to explain something of the purpose of the research and that the store was not privy to any of the results. Participants would not receive any special offers or paybacks for participating in the study.
- c. The correlation co-efficient is not statistically significant. The hypothesis has not been supported. The results tend to show that the time spent playing computer games is matched with lower scores on psychological well being and vice versa. Another, better designed study is needed to test the main idea.

END OF SUGGESTED SOLUTIONS