

INSIGHT

Trial Exam Paper

2010

PSYCHOLOGY

Written examination 2

STUDENT NAME:

QUESTION AND ANSWER BOOK

Reading time: 15 minutes
Writing time: 1 hour 30 minutes

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 the following items into the examination: pens, pencils, highlighters, erasers, sharpeners and rulers.
- Students are NOT permitted to bring sheets of paper or white out liquid/tape into the examination.
- Calculators are not permitted in this examination.

Materials provided

- The question and answer book of 23 pages.
- An answer sheet for the multiple-choice questions.

Instructions

- Write your **name** in the box provided and on the multiple-choice answer sheet.
- You must answer the questions 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 or any other electronic devices into the examination.

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

Answer **all** the questions in pencil on the multiple-choice answer sheet provided.
Choose the response that is **correct** or that **best answers** the question.
One mark will be awarded for a correct answer and no marks for an incorrect answer.
Marks **are not** deducted for an incorrect answer.
No marks will be awarded if more than one answer is given for any question.

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

Adrian was a keen student of biology but often had difficulty with examinations. Adrian's teacher advised him to create his own summary notes after reading through each section of his text and then to link the new information to what he already knew about each topic in a mind map. This process would ensure that the information was _____ more effectively enabling Adrian to easily _____ the material when needed during exams.

- A. stored, retrieve
- B. encoded, store
- C. stored, encode
- D. encoded, retrieve

Question 2

When Adrian followed his teacher's advice he found he learned his biology course content better but still made mistakes on practice exams. However, when he revised the material and then repeated the exams he performed much better. This improvement in performance on the subsequent exams demonstrated the greater sensitivity of the measure of retention known as

- A. cued recall.
- B. relearning.
- C. recognition.
- D. free recall.

Question 3

Olga enjoyed reading fantasy novels and always had her head in a book. According to the information-processing model the written words provided visual stimuli that were first registered in Olga's

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

Question 4

In the theory of working memory, to understand the story and keep all of the plot lines and characters in her memory, Olga would need to use the area of working memory known as _____ but when initially seeing the material she would rely on the _____.

- A. working memory, central executive
- B. visuospatial sketchpad, phonological loop
- C. central executive, visuospatial sketchpad
- D. phonological loop, visuospatial sketchpad

Question 5

Iconic memory has _____ capacity and _____ duration.

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

Question 6

Short-term memory has a capacity of

- A. 7 minus 2 bits of information.
- B. 9 bits of information.
- C. 7 plus 2 bits of information.
- D. 7 plus or minus 2 bits of information.

Question 7

When reading words on a page we are able to increase the capacity of short-term memory (STM) by grouping individual letters into words and keep an extended list of words in STM, thus helping us to link the words together and understand a piece of text. This is made possible by the process of _____.

- A. consolidation
- B. chunking
- C. elaboration
- D. semantics

Question 8

Maintenance rehearsal is effective as a means of increasing the _____ of _____.

- A. duration, STM
- B. duration, LTM
- C. capacity, STM
- D. capacity, LTM

Question 9

The phonological loop is responsible for

- A. storing a limited amount of visual and spatial information for possible further processing within the central executive.
- B. directing attention to incoming auditory information and integrating this with other sensory input.
- C. processing and storing a limited amount of auditory information until it is either attended to or discarded.
- D. processing and storing an extensive amount of auditory information until it is attended to.

Question 10

The branch of long-term memory that holds information about personal events or experiences is known as _____ and this is a subsystem of _____.

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

Question 11

Kieran had a solid week of work to complete. He had to prepare for SACs in psychology and biology that were both scheduled for the same day, and then a Maths SAC the day after. If Kieran wanted to ensure that he would be able to retrieve the information when needed and not confuse the psychology material with the biology material, he would be best advised to:

- A. look for material that was similar in each study and learn both at the same time.
- B. allow several hours between studying for each subject.
- C. make sure that he didn't make any links between the two subjects when studying.
- D. study biology before studying psychology.

Question 12

The theory of memory that states that concepts are stored in nodes and that nodes are linked according to meaning is known as the

- A. consolidation theory.
- B. elaborative rehearsal theory.
- C. semantic network theory.
- D. mnemonic theory.

Question 13

The forgetting curve devised by Hermann Ebbinghaus (1885) showed that

- A. the rate of forgetting was rapid within the first half-hour but levelled off after that.
- B. 42% of the information learned was still retained after 20 minutes.
- C. 58% of the information learned was still retained after 20 minutes.
- D. both A and C.

Question 14

Harry began a new job and was given a PIN for the computer network, which he easily memorised. He was later given a different PIN for the security lock at the entrance door, which he also memorised. After lunch when he tried to get back into the building he found that he could only recall the network PIN and not the entry PIN. This type of forgetting is known as _____ and is most likely to occur when information is _____.

- A. retroactive interference, similar
- B. proactive interference, similar
- C. motivated forgetting, painful
- D. decay theory, not used frequently

Question 15

Memory enhancement techniques rely on _____ to improve memory.

- A. shallow processing
- B. careful organisation of material
- C. elaborative rehearsal
- D. maintenance rehearsal.

Question 16

Studies into memory loss over the lifespan have found that

- A. the more meaningful information is, the less likely it is to be forgotten regardless of age.
- B. older people remember nonsense syllables more effectively than younger people.
- C. recognition tends to be an ineffective measure of retention for elderly people.
- D. memories begin to decay as soon as they are formed if not regularly retrieved.

Question 17

Research by Jane Berry et al. (1989) found that elderly people were likely to perform less well on memory tests than people in their early twenties. They concluded that this was most likely due to

- A. lack of confidence in their ability to remember.
- B. the use of recognition as a measure of retention.
- C. loss of procedural memories.
- D. loss of semantic memories.

Question 18

Lucas listened to the radio while he studied for a physics exam. When in the exam Lucas found he could not remember a key piece of information, however, when he went home and turned on the radio he immediately recalled the information. In this situation the radio acted as a

- A. memory cue.
- B. relearning cue.
- C. state-dependent cue.
- D. context-dependent cue.

Question 19

Finola was injured in a motor vehicle accident and became unconscious after hitting her head and suffering a brain injury. When waking up in the emergency department of the hospital Finola could not recall her name or what day it was, and had no recollection of the accident. This type of forgetting is described as _____ resulting from a/(an) _____ cause.

- A. retrograde amnesia, accidental
- B. retrograde amnesia, organic
- C. anterograde amnesia, natural
- D. anterograde amnesia, organic

Question 20

Narrative chaining relies upon _____ to aid retrieval.

- A. elaborative rehearsal
- B. visual imagery
- C. mnemonics
- D. maintenance rehearsal

Question 21

David was required to memorise a list of items that he needed for a school athletics carnival. As a means of remembering the full list he thought about the previous time he had attended an athletics carnival and how he has used all of the necessary items. This memorising tool is a form of elaboration known as

- A. narrative chaining.
- B. method of loci.
- C. self-referencing.
- D. encoding.

Question 22

A researcher studying the differences between the performance of elderly people and adolescents in a task involving recall of a list of nonsense syllables found that the younger group performed significantly better with a result of $p < 0.01$. This suggests that

- A.** the result cannot be generalised to the population of interest.
- B.** the difference in scores for the two groups was most likely due to the age difference.
- C.** if the research was repeated 100 times it is likely that in 1% of cases the result would be due to the manipulation of the IV and not due to chance.
- D.** the research hypothesis can be rejected.

AREA OF STUDY 2 – Learning**Question 23**

Which of the following is an example of a reflex action?

- A. an infant beginning to walk
- B. a spider building a complex web
- C. an infant's ability to grasp a finger
- D. a salmon swimming upstream to spawn in the same place that it was spawned

Question 24

Which of the following is an example of a behaviour dependent upon maturation?

- A. the nest-building behaviour of a bowerbird
- B. a baby beginning to crawl
- C. a baby bird beginning to fly
- D. an infant's ability to suckle

Question 25

In Pavlov's classic experiments the meat powder was

- A. the UCS.
- B. the UCR.
- C. the CS.
- D. the CR.

Question 26

In conditioning, the reappearance of a conditioned response when the conditioned stimulus is presented following a period of apparent extinction is known as

- A. an unconditioned response.
- B. stimulus generalisation.
- C. spontaneous recovery.
- D. stimulus discrimination.

Question 27

Which of the following is an **incorrect** statement about Pavlovian or classical conditioning?

- A. Learning occurs when the CS is paired with the UCS.
- B. The CR must be immediately followed by the UCR for conditioning to occur.
- C. The CS is neutral at the start of conditioning.
- D. The CR occurs only after the CS has been paired with the UCS.

Question 28

The tendency of the dogs in Pavlov's experiments to salivate at the sound of the research assistant's keys in the gate was an example of

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

Question 29

One difference between one-trial learning and true classical conditioning is

- A. a single pairing of the UCS and the CS is all that is necessary in classical conditioning but multiple pairings are necessary in one-trial learning.
- B. stimulus generalisation does not usually occur in one-trial learning, especially for taste-aversion, but it may occur in classical conditioning.
- C. the CR is readily extinguished in one-trial learning but not in classical conditioning.
- D. classical conditioning involves involuntary learning whereas one-trial learning does not.

Question 30

Skinner referred to an operant as

- A. a response, or set of responses, that follows a consequence.
- B. any organism that learns to respond to a stimulus.
- C. behaviours that are in response to known stimuli.
- D. a response, or set of responses, that generate/s some sort of environmental effect.

Question 31

In classical conditioning the role of the learner is _____ and in operant it is _____.

- A. active, active
- B. passive, passive
- C. active, passive
- D. passive, active

Question 32

In operant conditioning a stimulus that strengthens the behaviour is known as _____.

- A. an unconditioned stimulus
- B. a reinforcer
- C. a precedent
- D. a punisher

Question 33

With negative reinforcement the response is likely to be

- A. extinguished.
- B. punished.
- C. weakened.
- D. strengthened.

Question 34

When punishment is being applied it is best to

- A. punish the organism immediately before the undesirable behaviour is demonstrated.
- B. delay punishment of the organism until the most appropriate opportunity presents itself.
- C. administer the punishment immediately after the undesirable behaviour occurs.
- D. ensure that the form of punishment is appropriate to reinforce the undesirable behaviour.

Question 35

In Watson and Rayner's experiments with Little Albert the loud noise was the _____ while the white rat was the _____.

- A. CS, CR
- B. UCS, CR
- C. UCR, CR
- D. UCS, CS

Question 36

By deliberately conditioning a fear response in Little Albert, Watson and Rayner breached the ethical principle/s known as

- A. informed consent.
- B. confidentiality.
- C. ensuring no harm comes to the participant.
- D. all of the above.

Question 37

Shaping is also known as

- A. the method of successive approximations.
- B. the method of operant approximations.
- C. the method of loci.
- D. the method of spontaneous recovery.

Question 38

Which of the following is a correct statement about schedules of reinforcement?

- A. The fixed ratio schedule is when a reinforcer is given after an unpredictable number of correct responses.
- B. Variable schedules use partial reinforcement as they reward some correct responses but not all.
- C. Behaviours conditioned using partial reinforcement are quite easy to extinguish.
- D. The variable interval schedule is when reinforcement is given after fixed periods of time.

Question 39

In classical conditioning the response comes _____ the stimulus and in operant conditioning the response comes _____ the stimulus.

- A. before, before
- B. before, after
- C. after, after
- D. after, before

The following information relates to Questions 40, 41 and 42.

Xavier is a big football fan and watches every game that he can. Xavier analyses the moves made by each player and thinks about how he can repeat them. After watching he always practices his ball-handling and kicking skills, mimicking the techniques of his favourite players. One day he hopes that he can emulate the performance of Gary Ablett by playing in the AFL and winning the Brownlow Medal.

Question 40

In terms of observational learning, when watching the game Xavier is demonstrating _____ and when thinking about the techniques he has seen he is demonstrating _____.

- A. reproduction, motivation-reinforcement
- B. reproduction, attention
- C. motivation-reinforcement, modelling
- D. attention, retention

Question 41

Xavier is quite a talented footballer and finds it relatively easy to replicate the techniques that he watches on TV. In terms of the elements of observational learning, this is an example of

- A. attention.
- B. retention.
- C. reproduction.
- D. motivation-reinforcement.

Question 42

Xavier's desire to play football was increased when he watched the Brownlow count on TV and saw Gary Ablett win the medal. This can **best** be described as

- A. motivation-reinforcement.
- B. vicarious reinforcement.
- C. retention.
- D. reproduction.

Question 43

The results of Bandura's BoBo doll experiments suggest that

- A. failure to reproduce the aggressive behaviour did not necessarily mean that aggressive behaviour had not been learned.
- B. reinforcement of aggression decreases the likelihood of the reproduction of aggressive behaviour by the observer.
- C. punishment is an effective means of reducing aggressive behaviour in children.
- D. punishment of aggression increases the likelihood of reproduction of aggressive behaviour by the observer.

Question 44

Harlow (1949), following his research into learning, concluded that

- A. learning set involves more complex cognitive activity than operant conditioning.
- B. learning set is best described in terms of stimulus – response associations.
- C. learning set can only be applied to monkeys.
- D. monkeys are not capable of insightful behaviour.

**END OF SECTION A
TURN OVER**

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

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

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

Karina and Phoebe went to the Royal Melbourne Show together. They went on all the rides and spent hours roaming around looking at the various attractions. Later, when they were discussing their day, Karina found that her memories were not necessarily the same as Phoebe's in all respects. Using your knowledge of the information-processing model of memory, **explain** how the two girls could have slightly different memories of the same events.

2 marks

Question 2

Nora was studying for her physics exams and decided to learn the definitions by repeating them over and over to herself. Her friend Justin, a keen psychology student, told her that this was not a very effective method of learning.

- a. Identify** the type of rehearsal Nora was using to learn her definitions.

1 mark

- b. Identify and explain** a more effective method that Nora could use.

2 marks

SECTION B – AREA OF STUDY 1 – continued

Question 3

Relearning is considered the _____sensitive measure of retention and recall is the _____sensitive.

2 marks

Question 4

Bruno and Julian were big fans of James Bond films. Bruno thought the early films were much better than the more recent ones, but Julian preferred the later films. They constantly debated the merits of the new versus the older films as they watched them over and over again. Using the terms of Baddeley's theory of working memory, **explain** how the boys would use the various components when debating which were the better films.

3 marks

Question 5

John is a healthy and active man of 65. When he was at school he excelled at languages and learned French and Latin but once he left school, he found he had little opportunity to use his foreign language skills. John's grand-daughter also enjoyed studying languages but when he tried to help her prepare for her final French exams, 47 years later, John found that he couldn't remember many of the French words and had completely forgotten the rules of grammar.

Which theory of forgetting would **best explain** John's inability to remember the French material at the age of 65 when he knew it so well at the age of 18?

3 marks

SECTION B – AREA OF STUDY 1 – continued
TURN OVER

Question 6

A researcher conducted a study into the use of mnemonics as an aid in effectively encoding information to be recalled at a later date. He took care to apply the ethical guidelines in order to protect the rights of his participants. One guideline that he followed was that of the right of withdrawal. **Explain** this ethical principle.

1 mark

AREA OF STUDY 2 – Learning

Question 7

Trapdoor spiders live in burrows that they dig out of the ground and then line with silk. One kind of trapdoor spider, the tube spider, extends a tube of silk several centimetres above ground, attached to a twig, rock or tree trunk in order to catch prey. In what ways does this behaviour match the definition of a fixed-action pattern?

2 marks

Question 8

Frequency and timing of stimulus presentation are important during the acquisition phase of classical conditioning. **Explain** this statement.

2 marks

Question 9

In terms of classical conditioning **explain** the difference between extinction and spontaneous recovery.

2 marks

SECTION B – AREA OF STUDY 2 – continued
TURN OVER

Question 10

In operant conditioning, when a reinforcer is given after every correct response it is known as a _____ schedule of reinforcement, and this is the _____ effective schedule of reinforcement to use during the acquisition phase.

2 marks

Question 11

- a. **Explain** how a teacher threatening to give a student detention for not doing homework can be viewed as either negative reinforcement or punishment.

2 marks

- b. If the teacher rewarded a student for doing homework this would be an example of _____.

1 mark

Question 12

Using an appropriate example, **explain** the concepts of motivation and reinforcement as they relate to observational learning.

2 marks

Question 13

Conor and Yasmin began to play tennis on a regular basis. Neither had played tennis before but Yasmin had played squash. Conor was annoyed that Yasmin beat him the first few times they played. In terms of learning set, **explain** why Yasmin was better at tennis than Conor.

1 mark

END OF AREA OF STUDY 2
SECTION B - continued
TURN OVER

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, Doctor Young, interested in the incidence of post-natal depression in new mothers, conducted a study to determine whether parenting classes and counselling services would reduce depression and anxiety in the first 6 months after giving birth to their first child. Dr Young recruited participants by putting up posters in the ante-natal units of 10 urban and regional public hospitals across Victoria. Dr Young also placed advertisements in newspapers inviting first-time parents to take part in the study. Four hundred participants were recruited.

Prior to the study participants were provided with a complete written description of the study's aims and methods, and were asked to sign a consent form before taking part. Participants were also advised that they could withdraw from the study at any time.

Dr Young divided the participants into two groups of 200. Group 1 attended a series of parenting classes and was offered two counselling sessions. Group 2 did not receive counselling and did not attend the classes. When the mothers were followed up 6 months later, 18% of the counselling classes group reported experiencing symptoms of post-natal depression, while 37% of the no-treatment group reported symptoms.

The researcher set a significance level of 0.05 and the result was calculated as $p < 0.05$.

All participants were debriefed after the study.

Question 14

Write an appropriate operational hypothesis for this study.

2 marks

Question 15

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

IV _____

DV _____

2 marks

Question 16

Was this sample randomly selected? **Explain** your answer.

1 mark

Question 17

a. What research design was used in this study?

1 mark

b. **Explain** one benefit of this research design.

1 mark

c. In what key way does this design differ from the repeated measures design?

1 mark

Question 18

a. What type of statistics did Dr Young use when analysing the results of this study?

1 mark

b. What is one benefit of using this type of statistic?

1 mark

Question 19

Was the result statistically significant? **Explain** your answer.

2 marks

Question 20

a. What was the purpose of dividing the participants into two groups?

1 mark

b. Which of these groups was the experimental group? **Explain** your answer.

2 marks

Question 21

Why would a double-blind procedure have been inappropriate for this study?

1 mark

Question 22

- a. Dr Young was required to follow specific ethical guidelines in the conduct of her research. **Identify** one procedure that is evident in the description of the study.

1 mark

- b. **Identify** one other ethical guideline that Dr Young would have had to use but has not been clearly outlined in the description of the study.

1 mark

END OF QUESTION AND ANSWER BOOK