

INSIGHT

Trial Exam Paper

2006

PSYCHOLOGY

Written examination 2

Sample responses

This book presents:

- correct sample responses
- guidelines for approaching each section
- tips and mark allocations.

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SECTION A – Multiple-choice questions

General notes

Before responding to any multiple-choice question always:

- read the whole question thoroughly
- carefully consider each alternative and eliminate the incorrect responses before selecting one as the correct response. If you can explain why the wrong answers are wrong, you will be more likely to select the correct answer
- make sure you select the best response. Some responses may be half right and these can often trick you into selecting the wrong alternative.

The examination has a total of 90 marks and there are 90 minutes in which to complete it. Therefore you need to average one mark per minute.

Abbreviations are used for certain terms commonly referred to in Psychology. Please note that students should write out terms in full in their exam responses. This is mirrored in the sample responses, where answers are modelled with terms written out in full. In the discussion of these terms in the Tips, the following abbreviations have been used:

Term	Abbreviation	Term	Abbreviation
Long-term memory	LTM	Unconditioned stimulus	UCS
Short-term memory	STM	Unconditioned response	UCR
Conditioned response	CR	Dependent variable	DV
Conditioned stimulus	CS	Independent variable	IV

AREA OF STUDY 1 – MEMORY

Question 1

The information-processing model of memory states that information must be located in _____ memory and transferred to _____ memory before it can be used. This process is known as _____.

- A. long-term; short-term; storage
- B. short-term; long-term; encoding
- C. short-term; long-term; retrieval
- D. **long-term; short-term; retrieval**

Answer is D.

Tips

- *A. is incorrect because storage is the second stage of the process which occurs after encoding has taken place.*
- *B. is incorrect as retrieval involves bringing stored information from long-term memory (LTM) into short-term memory (STM) for use, and encoding is the process of changing incoming sensory information into a form that the brain can use.*
- *C. is incorrect as the information is retrieved from LTM and transferred to STM.*
- *D. is correct because the information previously encoded and stored is retained in LTM, and in order to be used it must be retrieved and transferred to STM.*

Question 2

Ingrid studied German at school but has not used the language since and thought she had forgotten most of it. When she visited Germany in her twenties she found that she could pick up the language reasonably well. This is an example of

- A. recognition.
- B. savings.
- C. recall.
- D. relearning.**

Answer is D.

Tips

- *A. is incorrect as recognition involves selecting required information from a range of alternatives.*
- *B. is incorrect, as although relearning is also known as the savings method, the term 'savings' is not sufficient to describe the example given.*
- *C. is incorrect as recall involves recalling information from LTM using limited cues.*
- *D. is correct as relearning involves relearning information that has already been learned and stored in LTM. The existing knowledge allows the new learning to be more effective.*

Question 3

Working memory processes information from

- A. long-term memory only.
- B. long-term and sensory memory.**
- C. sensory memory only.
- D. short-term memory only.

Answer is B.

Tips

- *A. and C. are incorrect as working memory uses information from sensory memory as well as LTM.*
- *B. is correct (see above).*
- *D. is incorrect as working memory is another term for STM.*

Question 4

Nerida had arranged to meet her mother at the railway station. When she saw her mother in the crowd, standing outside the railway station, she walked over to her. The area of memory that allowed Nerida to identify her mother and store information about her location in the environment is an area of _____ known as the _____.

- A. sensory memory; visuospatial sketchpad
- B. sensory memory; phonological loop
- C. **short-term memory; visuospatial sketchpad**
- D. long-term memory; visual working memory

Answer is C.

Tips

- *A. is incorrect as while the image of her mother would have initially entered sensory memory, processing would have taken place in STM. The term visuospatial sketchpad is correct.*
- *B. is incorrect as the phonological loop deals with sounds in verbal working memory.*
- *C. is correct. The area of STM where Nerida would have held the information is known as visual working memory or the visuospatial sketchpad.*
- *D. is incorrect as the processing would take place in STM not LTM.*

Question 5

Which of the following statements about short-term memory is correct?

- A. When consciously processing extensive pieces of information, we are inclined to forget some aspects of the information if it is held in short-term memory for longer than 20 seconds.
- B. The usual capacity of short-term memory is five bits of information, plus or minus two bits.
- C. The usual duration of short-term memory is between 18 and 40 seconds.
- D. **Displacement in short-term memory occurs when new information pushes out other information stored in short-term memory.**

Answer is D.

Tips

- *A. is incorrect because the reason we are inclined to forget extensive amounts of information is that the capacity of the STM will be exceeded. The information can be retained in the STM indefinitely provided it is rehearsed.*
- *B. is incorrect as the usual capacity is seven bits of information plus or minus two bits.*
- *C. is incorrect as the usual duration of STM is between 18 and 20 seconds.*
- *D. is correct as new information entering STM will displace old as the new information will cause the capacity of STM to be exceeded.*

Question 6

According to the consolidation theory, when information is being stored in long-term memory,

- A. **a period of consolidation is required if the new memory is to be permanently stored.**
- B. any interruption to the consolidation process will erase the stored memory.
- C. maintenance rehearsal is necessary if the information is to be consolidated and stored permanently.
- D. chunking will make the process more efficient.

Answer is A.

Tips

- *A. is correct as the consolidation theory states that a period of approximately 30 minutes is required for a physical change to the neurons to occur, which is necessary if a new memory is to be permanently stored.*
- *B. is incorrect because interruption to the consolidation process may impair the process thus resulting in a loss of some or all of the information. The term 'erased' is problematic as there is nothing to suggest that memories are capable of being completely removed once formed. If the memory has been stored the consolidation process will have already taken place and the memory will not be likely to decay in the short-term. If the consolidation process has not had long enough for memory to form then there is nothing to erase.*
- *C. is incorrect because maintenance rehearsal will only hold information in STM until it is no longer needed or until it can be elaborated and permanently stored in LTM. If maintenance rehearsal is used repeatedly the information may be stored in LTM but the process is more effective if elaboration is used.*
- *D. is incorrect as chunking is a method used to increase the capacity of STM and does not apply to the consolidation of new information in LTM.*

Question 7

Rashida was planning a piece of artwork for her folio based around a theme of animals. She did some initial sketches of farmyard animals based on a memory of a visit to her grandparent's farm. In this activity Rashida was using

- A. semantic memory.
- B. episodic memory.
- C. a combination of semantic, episodic and procedural memory.
- D. **a combination of episodic and procedural memory.**

Answer is D.

Tips

- *A. is incorrect as Rashida was not relying on her memories of farmyard animals per se, she was using memories from a particular event.*
- *B. is partially correct as the memory of the visit to the farm is an episodic memory.*
- *C. is incorrect as there is not a clear example of semantic memory being used.*
- *D. is correct as the memory of the visit to the farm is being used (episodic memory) as well as her knowledge of how to sketch (procedural memory).*

Question 8

In a later series of sketches, Rashida drew a scene depicting African animals. She used her memories of what the animals looked like to help her create the sketches. In this case Rashida was using a combination of

- A. procedural and episodic memory.
- B. procedural and semantic memory.**
- C. episodic and semantic memory.
- D. episodic, procedural and semantic memory.

Answer is B.

Tips

- *A., C. and D. are incorrect as no specific episode is being remembered.*
- *B. is correct as procedural memory is being employed in the sketching process, and by using her knowledge of African animals, Rashida is also using semantic memory.*

Question 9

Which of the following statements about serial position effect is correct?

- A. A typical graph illustrating the serial position effect would feature a steep decline in the percentage of words recalled during the first 20 minutes, with a flattening out of the curve after one hour.
- B. A typical graph illustrating the serial position effect would feature a steep rise in a curve ascending from right to left indicating a consistent improvement in recall for items later in a list.
- C. A typical graph illustrating the serial position effect would feature a U-shaped curve indicating that recall is greater for items at the beginning and end of a list, and less for items in the middle of a list.**
- D. A typical graph illustrating the serial position effect would feature an inverted U-shape indicating that recall is greater for items in the middle of a list and less for items at the beginning and end of the list.

Answer is C.

Tips

- *A., B. and D. are incorrect as recall is generally better for items at the beginning and end of a list, and least for items in the middle, which is represented by a U-shaped curve.*

Question 10

The theory that states that information in long-term memory is organised in networks of overlapping grids with links between similar information is known as the

- A. **semantic network theory.**
- B. consolidation theory.
- C. declarative network theory.
- D. processing model theory.

Answer is A.

Tips

- *A. is correct as the semantic network theory states that information in LTM is organised in overlapping grids of concepts which are linked to other grids by meaning.*
- *B. is incorrect as the consolidation theory refers to the time taken for memories to be formed in LTM.*
- *C. is incorrect as there is no declarative network theory. Declarative memory is one of the forms of LTM.*
- *D. is incorrect as the information processing model holds that information entering memory is not passively received but is actively processed in one of the three levels of memory – sensory memory, STM or LTM.*

Question 11

Which of the following statements about forgetting is correct?

- A. The amount and rate of forgetting is generally influenced by how well the information is learned but, even when well learned, more difficult material is forgotten more quickly than easily learned material.
- B. **Slow learners forget at approximately the same rate as fast learners.**
- C. If material is more meaningful to the learner it will be forgotten more readily.
- D. Most forgetting occurs approximately 12 hours after the initial learning.

Answer is B.

Tips

- *A. is incorrect as easily learned material is forgotten at the same rate as more difficult material.*
- *B. is correct as it is the quality of the initial encoding not the difficulty of the material that will most impact on the level of retention. Well-learned material will be retained for longer than poorly learned material.*
- *C. is incorrect as the more meaningful the information is to the learner, the better retention will be.*
- *D. is incorrect as most forgetting occurs within the first 20 minutes after learning.*

Question 12

Dominic was rehearsing for the school musical production and had to learn a new song each week. After rehearsal when he tried to recall the lyrics of the song learned in the current week's rehearsal he found that he could only recall the lyrics of the song learned the previous week. This is an example of

- A. proactive interference.**
- B. retroactive interference.**
- C. retrograde amnesia.**
- D. proactive amnesia.**

Answer is A.

Tips

- *A. is correct as proactive interference occurs when old information interferes with the ability to recall newly learned information.*
- *B. is incorrect as retroactive interference is an inability to recall old material because newly learned material interferes with recall.*
- *C. is incorrect as retrograde amnesia is an inability to recall information learned prior to receiving a brain injury.*
- *D. is incorrect as 'proactive amnesia' is not a term used in the study of memory.*

Question 13

The theory of forgetting that proposes that we sometimes forget due to the gradual fading of the physical memory trace is called

- A. pseudo-forgetting theory.**
- B. motivated forgetting theory.**
- C. memory trace theory.**
- D. decay theory.**

Answer is D.

Tips

- *A. is incorrect as this refers to a failure to store information in LTM initially – forgetting has not occurred as the information was never encoded. (The term is not used in the study design.)*
- *B. is incorrect as 'motivated forgetting' refers to the unconscious repression of traumatic memories.*
- *C. is not correct terminology.*
- *D. is correct. Decay theory states that the physical trace created by a stored memory gradually fades or decays, probably because of disuse.*

Questions 14 and 15 relate to the following scenario.

Damien was involved in an industrial accident, falling and hitting his head on a steel girder. Afterwards he found that he could not remember the names of the medical staff treating him, regardless of how many times they introduced themselves, nor any other new information they gave him.

Question 14

Damien's condition is an example of

- A. retroactive interference.
- B. anterograde interference.
- C. retrograde amnesia.
- D. anterograde amnesia.**

Answer is D.

Tips

- *A. is incorrect as retroactive interference occurs when new information interferes with the ability to remember old information.*
- *B. is incorrect as this is not correct terminology.*
- *C. is incorrect as retrograde amnesia refers to the inability to remember information required before receiving a brain injury.*
- *D. is correct as anterograde amnesia is the inability to form new memories after receiving a brain injury.*

Question 15

Which of the following would be most likely to apply to Damien?

- A. His memory loss is likely to be permanent.**
- B. His memory of events before the accident is likely to deteriorate.
- C. His ability to form new memories is likely to return.
- D. He is likely to vividly recall the moments preceding the accident but nothing since.

Answer is A.

Tips

- *A. is correct as people who suffer from anterograde amnesia generally experience permanent amnesia.*
- *B. is incorrect as loss of memory for events preceding the injury (retrograde amnesia) does not generally occur simultaneously with anterograde amnesia.*
- *C. is incorrect as the condition is permanent.*
- *D. is incorrect as the events immediately preceding the accident are not likely to be recalled, because there was insufficient time for the consolidation of the information in LTM. By definition, anterograde amnesia is the inability to form new memories after brain injury.*

Question 16

It has been reported that mood can have a major impact upon the types of memories we recall. For example, when feeling very unhappy we are more likely to recall other unhappy memories rather than happy memories. This phenomenon is attributed to the mood providing a

- A. state-dependent cue.**
- B. context-dependent cue.**
- C. emotion-dependent cue.**
- D. retrieval cue.**

Answer is A.

Tips

- *A. is correct as state-dependent cues are those that are related to the specific physiological or psychological state at the time a memory is formed.*
- *B. is incorrect as context-dependent cues are those that are related to the specific environment or context where a memory is formed.*
- *C. is incorrect as the terminology is incorrect.*
- *D. is incorrect because while state-dependent cues are retrieval cues, the response is not specific enough.*

Question 17

Anna was in the habit of memorising key pieces of information by linking them to pieces of information she already understands. This is an example of

- A. mnemonics.**
- B. rote learning.**
- C. rehearsal.**
- D. elaboration.**

Answer is D.

Tips

- *A. is incorrect because although mnemonics are techniques used to improve memory, the term is not specific enough to adequately answer this question.*
- *B. is incorrect as rote learning involves repeating or rehearsing a piece of information over and over and does not involve adding meaning to the information.*
- *C. is incorrect as the term is not precise enough.*
- *D. is correct as elaboration involves manipulating new information, by linking it to information already held in LTM, to make it more meaningful.*

Question 18

Research into the effects of aging on short-term memory has found that

- A. relatively simple tasks are less likely to be performed successfully unless the individual has a strong interest in the material.
- B. tasks that require more complicated manipulation of material are usually performed more successfully than simple tasks.
- C. **tasks that require divided attention are less likely to be performed successfully.**
- D. after the age of 60 years, the speed of processing in long-term memory is decreased.

Answer is C.

Tips

- *A. is incorrect because relatively simple tasks are usually performed successfully by elderly people.*
- *B. is incorrect because age-related factors such as reduced neuronal activity may impact upon the speed at which complex information is manipulated making cognitive tasks more difficult.*
- *C. is correct as tasks that require divided attention may be adversely affected by slower neuronal activity in elderly people.*
- *D. is incorrect because the speed of processing in STM, not LTM, has been found to be slower in many elderly people. The question does not ask about LTM.*

Question 19

The key to the way in which mnemonic devices help to improve memory is that

- A. they are generally rhymes, making them easy to remember.
- B. they link to information already held in short-term memory.
- C. they are easy to learn as they simplify new material.
- D. **they improve the way information already held in long-term memory is organised.**

Answer is D.

Tips

- *A. is incorrect as mnemonic devices don't necessarily have to be rhymes.*
- *B. is incorrect as mnemonic devices link information already held in LTM not STM.*
- *C. is incorrect as mnemonic devices do not simplify information held in LTM, but actually elaborate upon it.*
- *D. is correct because the elaboration involved in devising mnemonics links the information to already known information making it easier to locate the information in LTM and therefore easier to retrieve it.*

Question 20

The key to the way in which the 'method of loci' improves recall is that

- A. it links information to be learned with very familiar locations which act as cues.**
- B. it links information to be learned with novel locations which act as cues.
- C. it helps to organise information chronologically.
- D. it helps to organise information into an easily remembered story.

Answer is A.

Tips

- *A. is a correct description of the way the method of loci works.*
- *B. is incorrect as novel locations would actually be more difficult to recall as they are not already stored in LTM.*
- *C. is incorrect as there is no link to date order in the method of loci.*
- *D. is incorrect as the method known as narrative chaining organises information into a story.*

Question 21

Jalani always tries to remember complex information by linking it to personal experiences that have something in common with the material to be learned. She finds that when she recalls the experience she is able to recall the information she needs to use. This is an example of using _____ to enhance encoding.

- A. self-examination
- B. self-referencing**
- C. maintenance rehearsal
- D. rote learning

Answer is B.

Tips

- *A. is incorrect as this terminology is not used in the study of memory.*
- *B. is correct. Self-referencing involves memorising information by relating it to personal experience.*
- *C. and D. are incorrect as both of these use the technique of repeating information over and over to keep it in STM.*

AREA OF STUDY 2 – LEARNING

Question 22

Which of the following statements about learning is correct?

- A. Learning will only take place if there is a clear intention on the part of the organism to learn.
- B. An organism must actively participate in a learning activity before learning will occur.
- C. **Learning involves either an observable change or the potential for change in the organism.**
- D. Learned behaviour results in a permanent change in the behaviour of the organism.

Answer is C.

Tips

- *A. is incorrect as learning may be intentional or unintentional.*
- *B. is incorrect as learning may be active or passive.*
- *C. is correct because learning must result in some change either in behaviour or in the capacity of behaviour.*
- *D. is incorrect because learning is relatively permanent, but it is often the case that previously learned material will be lost.*

Question 23

The ability of a newborn infant to suckle is an example of

- A. **a reflex action.**
- B. behaviour dependent upon learning.
- C. behaviour dependent upon maturation.
- D. a fixed action pattern.

Answer is A.

Tips

- *A. is correct because the sucking reflex occurs naturally as a response to stimulation; it is automatic and involuntary and related to survival.*
- *B. is incorrect because the infant does not need to learn to suckle.*
- *C. is incorrect because, while the behaviour is dependent upon maturation to a point, it does not fall into the category of behaviours dependent upon maturation. These behaviours occur in an orderly pattern and are part of the developmental process, not necessarily related directly to survival.*
- *D. is incorrect because the sucking reflex is a simple behaviour, it is not a complex sequence of behaviours and it is not species specific.*

Question 24

Behaviours consistent with a fixed action pattern are always

- A. gender specific.
- B. species specific.**
- C. easily learned.
- D. unique to the individual organism displaying the behaviour.

Answer is B.

Tips

- *A. is incorrect because while fixed action patterns may be gender specific within a species they are not always so.*
- *B. is correct because fixed action patterns are inherited patterns of behaviour that are performed the same way by all members of a species, or all members of the species of a particular gender.*
- *C. is incorrect as behaviours exhibited as a part of a fixed action pattern are inherited, not learned.*
- *D. is incorrect because all members of the species who exhibit the behaviour will do so in the same way.*

Questions 25 and 26 refer to the following information.

Pavlov's (1899) work on classical conditioning, developed the ideas of stimulus and response.

Question 25

In this series of experiments the UCR was

- A. salivation at the presentation of the meat powder.**
- B. salivation at the sound of the bell.
- C. salivation at the sight of the technician.
- D. both B. and C.

Answer is A.

Tips

- *A. is correct because the meat powder would naturally produce the salivation response in the animal.*
- *B., C. and D. are incorrect because B. and C. are examples of conditioned stimuli. The response to these stimuli has been conditioned due to the pairing of the bell and the technician with the meat powder.*

Question 26

In this series of experiments the UCS was

- A. the sound of the bell.
- B. the sight of the technician.
- C. both A. and B.
- D. the meat powder.**

Answer is D.

Tips

- *A., B. and C. are incorrect because the sound of the bell and the sight of the technician are both conditioned stimuli.*
- *D. is correct because the meat powder would naturally produce the salivation response without conditioning.*

Questions 27 and 28 relate to the following scenario.

Margaret always picks up her keys before taking the dog for a walk. Margaret has noted that when she picks up her keys to go to work the dog becomes very excited and runs to the door.

Question 27

In terms of classical conditioning, the keys are the _____, while the dog running to the door is the _____.

- A. conditioned stimulus; unconditioned response
- B. conditioned stimulus; conditioned response**
- C. unconditioned stimulus; unconditioned response
- D. unconditioned stimulus; conditioned response

Answer is B.

Tips

- *A. is incorrect because becoming excited and running to the door are conditioned responses. It would not be normal for the dog to exhibit these behaviours when the keys were picked up.*
- *B. is correct because the keys are the conditioned stimulus and the excitement and running to the door is the conditioned response. The pairing of the keys (CS) and the walk (UCS) has produced the conditioned response.*
- *C. is incorrect because the UCS is the walk and the excited behaviour is the CR.*
- *D. is incorrect as the UCS is the walk.*

Question 28

Margaret notices that the dog does not exhibit the excited behaviour when she picks up her purse; it is only exhibited in response to picking up her keys. This is an example of

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

Answer is D.

Tips

- *A. is incorrect because extinction occurs when the CS is no longer paired with the CR.*
- *B. is incorrect because stimulus generalisation occurs when any stimulus similar to the CS produces the CR.*
- *C. is incorrect because spontaneous recovery is a renewal of the CR after extinction has occurred.*
- *D. is correct because the dog is only responding to a specific stimulus – the keys.*

Question 29

In research conducted in the 1930s, alcoholics were given electric shocks each time they smelled or tasted alcohol. This was designed to instil a negative response to alcohol in the alcoholic person, thus eliminating the desire to consume it. Which of the following terms best describes this treatment?

- A. one-trial learning
- B. observational learning
- C. **aversion therapy**
- D. conversion therapy

Answer is C.

Tips

- *A. is incorrect because, while the aversion to the undesired stimulus may be generated after just one trial, the best response is aversion therapy as this is more specific.*
- *B. is incorrect as in observational learning the learner simply observes a model and learns how to emulate the behaviour through observation.*
- *C. is the correct response. Aversion therapy pairs an undesirable stimulus with the behaviour that is to be extinguished. In this case the electric shock is the stimulus and the aversion to alcohol is the desired behaviour or response.*
- *D. is incorrect as this term is not used in the study of learning.*

Question 30

If the research by Watson and Raynor (1920) was put to an ethics committee today, it would not be approved because it would not comply with modern ethical guidelines which stipulate that four basic ethical principles must be considered in psychological research. Which of the following are two of these ethical principles that were breached by Watson and Raynor in their experiments with Little Albert?

- A. beneficence and respect for persons**
- B. beneficence and withdrawal rights**
- C. withdrawal rights and respect for persons**
- D. informed consent and respect for persons**

Answer is A.

Tips

- *The four basic ethical principles are integrity, respect for persons, beneficence (the researcher's responsibility to maximise benefits and minimise harm to participants) and justice.*
- *B., C. and D. are incorrect because withdrawal rights and informed consent are not ethical principles, they are specific participant rights, related to beneficence.*

Question 31

In operant conditioning the behaviour that is conditioned using partial reinforcement is generally

- A. the most easily changed behaviour.**
- B. extinguished as soon as reinforcement is withdrawn.**
- C. the most easily learned behaviour.**
- D. the most resistant to change.**

Answer is D.

Tips

- *A. is incorrect because responses that are strengthened through a partial reinforcement strategy are the most resistant to change.*
- *B. is incorrect as, even if reinforcement was withdrawn completely, it would take some time for the response to be completely extinguished.*
- *C. is incorrect as this response is too general. Different types of behaviour may be easier, or more difficult to learn, depending on the specific behaviours.*
- *D. is correct, as explained above.*

Question 32

E. L. Thorndike (1874–1949) conducted experiments on learning using cats while B. F. Skinner (1904–90) studied learning using rats. Thorndike used the terms _____ and _____ to describe the cat's behaviour, while Skinner used the term _____ to describe the rat's behaviour.

- A. instrumental learning; respondent conditioning; operant conditioning
- B. instrumental learning; trial and error learning; operant conditioning**
- C. operant conditioning; classical conditioning; respondent conditioning
- D. classical conditioning; trial and error learning; operant conditioning

Answer is B.

Tips

- *A. is incorrect as 'respondent conditioning' was a term used by Skinner not Thorndike.*
- *B. is correct as Thorndike used the term 'instrumental learning' to describe learning in which the organism is instrumental in bringing about a desired consequence. Thorndike also used the term 'trial and error learning' as he found that during the process of instrumental learning the organism would often try various strategies until the appropriate strategy was found. Skinner used the term 'operant conditioning' as he noted that the organism operates upon their environment to bring about a desired consequence.*
- *C. and D. are incorrect because Pavlov studied classical conditioning at this time, not Thorndike.*

Question 33

Thorndike developed the law of effect. This states that

- A. behaviour that is followed by positive consequences is weakened while behaviour that is followed by negative consequences is strengthened.
- B. behaviour that is followed by positive consequences is strengthened while behaviour that is followed by negative consequences is weakened.**
- C. a positive stimulus, when paired with a positive response will generate an increase in the desired behaviour in the respondent.
- D. a negative stimulus, when paired with a positive response will generate an increase in the desired behaviour in the respondent.

Answer is B.

Tips

- *A. is incorrect because positive consequences will strengthen a behaviour, not weaken it.*
- *B. is correct because positive consequences will increase the likelihood of a desired behaviour being repeated.*
- *C. and D. are incorrect because pairing a stimulus and response is language that is more often associated with classical conditioning, and the term respondent was used by Skinner, not Thorndike.*

Question 34

Road safety laws require motorists to abide by the speed limit and these laws are enforced by way of speeding fines. When a motorist sticks to the speed limit they avoid the negative consequences of a fine, and a possible serious road accident. In operant conditioning terms this is an example of

- A. positive reinforcement.
- B. continuous reinforcement.
- C. punishment.
- D. **negative reinforcement.**

Answer is D.

Tips

- *A. is incorrect as positive reinforcement occurs when a reward is given in response to a desirable behaviour. Positive reinforcement will increase the likelihood of the behaviour being repeated.*
- *B. is incorrect because continuous reinforcement is a form of positive reinforcement given every time the desired behaviour is performed.*
- *C. is incorrect because punishment is a negative consequence of undesirable behaviour aimed at weakening the behaviour.*
- *D. is correct because negative reinforcement occurs when an undesirable consequence is removed (no speeding fine) therefore strengthening the likelihood of the behaviour (obeying the speed limit) being repeated.*

Question 35

A motorist who disobeys the road laws and is caught speeding will receive a fine. In operant conditioning terms the fine represents _____ and is designed to _____ the speeding behaviour

- A. positive reinforcement; strengthen
- B. continuous reinforcement; strengthen
- C. **punishment; weaken**
- D. negative reinforcement; weaken

Answer is C.

Tips

- *A. is incorrect as positive reinforcement occurs when a reward is given in response to a desirable behaviour. Positive reinforcement will increase the likelihood of the behaviour being repeated.*
- *B. is incorrect because continuous reinforcement is a form of positive reinforcement given every time the desired behaviour is performed, and is designed to strengthen the behaviour*
- *C. is correct because punishment is a negative consequence of undesirable behaviour aimed at weakening the behaviour. By receiving a speeding fine (negative consequence) the motorist is less likely to speed in future, thus the speeding behaviour is weakened.*
- *D. is incorrect because negative reinforcement occurs when an undesirable consequence is removed (no speeding fine) therefore strengthening the likelihood of the behaviour (obeying the speed limit) being repeated.*

Question 36

Frances had little interest in team sports but many of her workmates regularly play or attend team sports. In an effort to increase production at her workplace, Frances's employer offered tickets to the Grand Final, to be held two months later, for any employee that increased their output over the following month. Frances did not feel any incentive to increase her production although some of her workmates responded positively at first. The employer found though that overall production did not increase significantly. In terms of operant conditioning, why was this incentive not particularly successful?

- A. It was ill-timed and presented in the wrong order.
- B. It was inappropriate and ill-timed.**
- C. It was presented in the wrong order, but the timing was correct.
- D. It was appropriate but presented in the wrong order.

Answer is B.

Tips

- *A. is incorrect because although the incentive was ill-timed as the reinforcer (the Grand Final tickets) was to be given two months after the desired behaviour. To be most effective reinforcement should be given immediately after the desired response has occurred. The incentive was presented in the correct order – reinforcement should be given after the desired response in operant conditioning.*
- *B. is correct because the reward was inappropriate for Frances. In order for any stimulus to be an appropriate reinforcer it must provide a satisfying consequence to the learner. The Grand Final tickets would not provide a pleasant reward to Frances. The reward was also ill-timed, as described above.*
- *C. is incorrect because the order of presentation was correct, as reinforcement should be given after the desired response. Also, the timing was incorrect.*
- *D. is incorrect as the reward was inappropriate, but the order was correct.*

Question 37

Which of the following is a correct statement about both classical and operant conditioning?

- A. In both classical and operant conditioning the learner is passive.
- B. In operant conditioning the learning is voluntary, while in classical conditioning the learning is involuntary.
- C. In both classical and operant conditioning there is the possibility of stimulus discrimination.**
- D. In both classical and operant conditioning the stimulus, or reinforcer, must occur before, or in conjunction with, the response.

Answer is C.

Tips

- *A. is incorrect because in classical conditioning the learner is passive, but in operant conditioning the learner is active.*
- *B. is incorrect because in operant conditioning the learning may be voluntary or involuntary, but in classical conditioning the learning is involuntary.*
- *C. is correct. Stimulus discrimination, the tendency to respond to a very specific stimulus, is a possible feature of both classical and operant conditioning.*
- *D. is incorrect as in classical conditioning the UCS and CS must be presented before the UCR or CR. In operant conditioning the response (desired behaviour) occurs before the stimulus (reinforcer) is given.*

Question 38

Which of the following is a correct statement about observational learning?

- A. In observational learning the learner may mimic the behaviour whether it is directly observed or not.
- B. In observational learning the process of trial and error is usually applied.
- C. **In observational learning it is important that the learner is motivated to reproduce the modelled behaviour.**
- D. In observational learning the learner should ideally always be reinforced as a consequence of performing the learned behaviour.

Answer is C.

Tips

- *A. is incorrect as the essence of observational learning is that the behaviour must be observed to be learned.*
- *B. is incorrect as trial and error is more appropriately applied to operant conditioning.*
- *C. is correct as motivation is one of the four elements of observational learning. These are attention, retention, reproduction and motivation/reinforcement.*
- *D. is incorrect because behaviour learned through observation may be reproduced with or without reinforcement.*

Questions 39 and 40 refer to the following scenario.

Hayley and Jill were taking a patch-working class together. Hayley was gratified when the instructor complimented her on her technique. Hayley was then motivated to continue her classes. When Jill noticed the instructor's praise for Hayley's technique, she endeavoured to copy the technique in her own work.

Question 39

In terms of observational learning, which form of reinforcement did Hayley receive?

- A. internal reinforcement
- B. external reinforcement**
- C. vicarious reinforcement
- D. self-reinforcement

Answer is B.

Tips

- *A. is incorrect as 'internal reinforcement' is not a term that is used in observation learning theory.*
- *B. is correct as external reinforcement involves reinforcement being given directly from an external source. The praise given by the instructor is an external source of reinforcement.*
- *C. is incorrect as vicarious reinforcement occurs when learning occurs as a result of watching another person being reinforced for that behaviour.*
- *D. is incorrect because self-reinforcement occurs when we are reinforced by ourselves after meeting certain personally set goals or ideals.*

Question 40

In terms of observational learning, which form of reinforcement did Jill receive?

- A. internal reinforcement
- B. external reinforcement
- C. vicarious reinforcement**
- D. self-reinforcement

Answer is C.

Tips

- *A. is incorrect as 'internal reinforcement' is not a term that is used in observation learning theory.*
- *B. is incorrect as external reinforcement involves reinforcement being given directly from an external source.*
- *C. is correct as vicarious reinforcement occurs when learning comes about as a result of watching another person being reinforced for that behaviour. Jill observed Hayley being reinforced, so she adopted Hayley's behaviour.*
- *D. is incorrect because self-reinforcement occurs when we are reinforced by ourselves after meeting certain personally set goals or ideals.*

Question 41

In Bandura's research into observational learning he found that

- A. children who saw the model being punished did not imitate the aggressive behaviour, even when offered positive reinforcement.
- B. all of the children imitated the aggressive behaviour when they were offered a positive reinforcer.**
- C. when offered reinforcement, the girls were more aggressive than the boys.
- D. when offered reinforcement, the boys and girls were equally aggressive.

Answer is B.

Tips

- *A. is incorrect because when offered positive reinforcement the children behaved aggressively.*
- *B. is correct as even those children who had seen the model being punished, and who had previously not acted aggressively, acted aggressively when offered a reward for doing so.*
- *C. and D. are incorrect as, in all trials, the boys were more aggressive than the girls.*

Question 42

Bandura's (1965) experiments also found that

- A. if the observer learns as a result of modelling they may not necessarily demonstrate the learned behaviour until an appropriate reinforcer is offered.**
- B. if the observer does not perform the modelled behaviour then learning has most likely not occurred.
- C. if the observer learns as a result of modelling they will demonstrate the learned behaviour.
- D. observation of a modelled behaviour is necessary for any learning to take place.

Answer is A.

Tips

- *A. is the correct response. Bandura found that observers learn by forming a cognitive representation of the observed behaviour, but may not reproduce it unless appropriately reinforced.*
- *B. and C. are incorrect because learning may occur without any demonstration of the learned response.*
- *D. is incorrect as it states that we learn only through observation.*

Question 43

Which of the following statements about learning set is correct?

- A. Learning set occurs when knowledge and skills previously learned are transferred to a new learning situation, thus improving learning.**
- B. Harlow (1949) found that learning set demonstrates the effectiveness of stimulus–response learning.
- C. Harlow’s experiments found that a learner that is presented with too many choices will not demonstrate learning set.
- D. Harlow concluded that learning set will occur in monkeys but that this theory cannot be generalised to humans.

Answer is A.

Tips

- *A. is correct as learning set is defined as the improvement in learning ability that results from previous experience in another similar learning situation.*
- *B. is incorrect as Harlow found that learning set is a more complicated form of learning than a simple stimulus–response model.*
- *C. is incorrect because the number of choices was not the issue in Harlow’s experiments. Repeated trials found that learning improved as a result of experience, not as the result of the number of choices given.*
- *D. is incorrect as Harlow’s findings demonstrated cognitive changes that occurred in monkeys, and the findings were generalisable.*

Question 44

Learning theorists who believe that thinking processes are central to the study of learning have

- A. been largely discredited.
- B. placed great importance on stimulus–response learning.
- C. found that learning will not occur unless the learner is motivated to actively participate in the process.
- D. focused more on cognitive processes than earlier researchers.**

Answer is D.

Tips

- *A. is incorrect as the role of thinking in learning is a current field of research and has not been discredited.*
- *B. is incorrect as conditioning theorists put more emphasis on stimulus–response models than cognitive learning theorists.*
- *C. is incorrect as, while motivation may play a part, the changes in the brain structures as a result of learning are the key areas of research for those studying cognition and learning.*
- *D. is correct. Thinking processes are also called cognitive processes.*

SECTION B – Short-answer questions

General note

Read the question carefully. Highlight or circle the key words and pay particular attention to the action word. Also note the number of marks. If there are three marks, you need to provide three specific pieces of information.

A useful hint is to resist the temptation to write full sentences. Quite often, students use their valuable time rewriting the question when the assessor is simply interested in seeing the correct information that will appropriately answer the question.

AREA OF STUDY 1 – MEMORY

Question 1

Describe the key features of sensory memory, in terms of function, duration and capacity.

Sample response

Function: Sensory memory receives incoming sensory messages from the body's various sensory receptors, and transfers information to short-term memory.

Duration: Iconic sensory memory holds information for approximately 0.3 seconds. Echoic sensory memory holds information for approximately 3 or 4 seconds.

Capacity: The capacity of sensory memory is unlimited.

4 marks

Tips

- *Note that the Unit 4 VCE Psychology course covers only two types of sensory memory: iconic and echoic sensory memory.*
- *The most valuable piece of advice to help you gain the maximum number of marks in the exam is to read the question carefully, and then make sure you address the question precisely. This sounds very obvious but so often students provide poor responses and earn very few marks because they have failed to do this.*
- *An important point to remember is that you are required to use the correct terminology. In many subjects you are encouraged to put information into your own words to further your understanding. In Psychology, it is best to learn the definitions word for word and then provide an example in your own words to demonstrate your understanding.*

Marks

- *1 mark for identifying the reception and transmission properties of sensory memory. If only one of these processes is identified no marks will be awarded.*
- *1 mark for identifying iconic memory and its duration, and 1 mark for identifying echoic memory and its duration.*
- *1 mark for stating that the capacity is unlimited.*

Question 2

Provide an example to illustrate the difference between maintenance and elaborative rehearsal.

Sample response

When trying to remember a personal identification number, e.g. 1394, we could continually repeat it mentally in order to remember the information. However, it will be lost as new information enters the short-term memory. A more effective method would be to add meaning by finding a mathematical equation that uses the numbers, e.g. $13 = 9 + 4$.

2 marks

Tips

- *Any appropriate example is acceptable in this response.*
- *In Psychology it is important to be able to use the correct terminology when answering questions such as this. In your study you should learn the definitions thoroughly and add to your understanding by creating your own examples to demonstrate the terms.*
- *However, when providing examples, make very sure that the example is clear and easy to understand.*
- *In the exam, examples used in the texts are acceptable, but your learning will be improved if you create your own.*

Question 3

Define the term ‘motivated forgetting’ and provide an example to illustrate this term.

Sample response

Definition: A theory of forgetting that states that information stored in long-term memory cannot be retrieved as the individual has a strong, unconscious motive not to retrieve the information, usually because the memory is too painful.

Example: A child witnesses an accident in which a family member is killed. The child finds the memory too painful to recall so unconsciously represses the memory.

2 marks

Tips

- *Any appropriate example is acceptable in this response.*
- *This is another way that you may be asked to define and explain a term. In this type of question the most common mistake is to provide one or the other, either the definition or the example. For full marks both must be included.*
- *As previously stated, it is most important that the example is clear.*

Question 4

Patrick was thinking about what he would like to do for his eighteenth birthday. He could not decide whether he wanted to have a party or not. As he tossed the idea around, he was surprised to find that a very vivid memory of his fifth birthday party, during which a child had broken one of his presents, popped into his head. Patrick had not thought about this incident for many years and thought he had forgotten all about it. Explain in terms of semantic network theory why Patrick would suddenly remember this incident.

Sample response

Semantic network theory states that information is systematically organised in long-term memory in overlapping grids of concepts. Each of the grids is linked to similar pieces of information, and activating one memory will cause related nodes to be activated, thus triggering similar memories.

Patrick was thinking about birthday parties which activated the nodes related to his fifth birthday party, prompting him to remember this event even though he hadn't been consciously trying to recall it.

3 marks

Tip

- *This is another example where providing the definition, then linking the definition to the situation, is the appropriate way to respond.*

Marks

- *2 marks are awarded for the definition of the semantic network theory and 1 mark is awarded for the explanation.*

Question 5

Monique was unable to recall several road rules when undertaking her driving test. Later when she was telling her mother about the test, the forgotten information popped into her head.

5a. Explain Monique's experience in terms of retrieval failure theory.

Sample response

Retrieval failure theory states that recall for information stored in long-term memory is hindered by the failure to use the correct retrieval cue. Monique was unable to find the information stored in long-term memory during the test, even though she had previously learned it, as she did not use the correct cue.

2 marks

- 5b.** Describe, using a specific example, how Monique could use a combination of self-referencing and elaboration to learn the road rules.

Sample response

Monique could relate a particular road rule to a specific incident that occurred during her driving lessons. For example, she may have seen someone exceeding the speed limit in a built-up area. She could then think about other aspects of the lesson, for example, where she was, how built up the area was, what the day was like, etc. to elaborate the information and encode it better.

2 marks

- 5c.** Monique could have used a mnemonic such as narrative chaining where she selected key terms from the road rules and linked them together in a narrative.

Sample response

Monique could have used a retrieval cue such as the first letter of the key word to help her locate the information in long-term memory. By mentally going through all the letters of the alphabet she may have been able to jog her memory when she came to the correct letter.

2 marks

Tips

- *Note that when using terms such as 'long-term memory', write the full term not the abbreviation, unless the full term has already been provided in the question.*
- *This question is typical of a three-part question that may appear on the exam paper. The trick to correctly answering such questions, and ensuring that you receive the maximum mark allocation, is to carefully plan your response to ensure that the appropriate piece of information is provided for each section.*
- *A common problem is that students put too much information into the first one or two sections, then have nothing left to say for the third.*
- *To answer part a. you are required to define retrieval failure theory and relate it to this example. Whenever a question says 'explain in terms of' it is saying, use the appropriate psychological terminology to explain this information. Therefore providing the definition is the best way to approach the question.*
- *To answer part b. you need to demonstrate your understanding of self-referencing and elaboration by applying them to this particular example. Here you have not been asked for definitions.*
- *For part c. you need to be very careful that you don't repeat information previously provided. Explaining how retrieval cues will work here, but you could also provide an explanation of an appropriate mnemonic technique.*

AREA OF STUDY 2 – LEARNING

Question 1

Define the term ‘extinction’ as it applies to classical conditioning.

Sample response

Extinction is the gradual decrease in the strength of a conditioned response that occurs when the conditioned stimulus is no longer presented.

1 mark

Question 2

2a. Under what circumstances would spontaneous recovery occur once a conditioned response has been extinguished?

Sample response

If the conditioned stimulus is presented after extinction has occurred, the conditioned response may reappear.

1 mark

2b. In what **two** ways would the recovered conditioned response differ to the original response?

Sample response

The conditioned response tends to be weaker than it originally was, and its recurrence is usually only temporary.

2 marks

Tips

- *In this case you may be tempted to respond by writing: ‘The recovered response would differ from the original conditioned response in that it tends to be weaker than the original response, and the recurrence also tends to be temporary’. This is not required. The key points you need to make are that the response is weaker and temporary.*

Question 3

What is the aim of systematic desensitisation?

Sample response

To replace a fear response with a relaxation response.

1 mark

Tips

- *This is another example of how providing a short answer will suffice to answer the question.*
- *This question also highlights the need to very carefully read the question and to be clear about what information you are required to provide. The temptation here might be to define systematic desensitisation, or to explain the process, when this is not what is required.*

Question 4

Identify and explain the **four** elements of observational learning. In your answer, use an example to demonstrate each element.

Sample response

Attention: The observer must first attend to the behaviour that is being modelled.

Example: A ballet student must watch the instructor demonstrate the steps.

Retention: The observer must be able to remember the model's behaviour.

Example: The student must remember how the instructor performed the steps.

Reproduction: The observer must be able to reproduce the observed behaviour.

Example: The ballet student must be able to perform the steps.

Motivation/reinforcement: The learner must be sufficiently motivated to perform the behaviour. The performance of the behaviour must provide some reward to the learner.

Example: The ballet student must want to learn how to perform the steps and gain some personal satisfaction from the successful performance.

8 marks

Marks

- *1 mark is awarded for the identification and explanation of each element, and 1 mark is awarded for the example that illustrates the element.*
- *Naming the element and not providing an explanation, or providing an explanation without naming the element would result in no marks for that section.*

Tip

- *The example must not take the place of the explanation.*

AREA OF STUDY 3 – RESEARCH INVESTIGATION

Read the following research investigation. All questions which follow relate to this investigation. Answer all questions.

A researcher wished to determine the impact of listening to music on learning. He randomly assigned the study participants to three different groups and presented the same list of 20 nonsense syllables to each group. All three groups were required to memorise the list of nonsense syllables by repeating the list five times and then writing out the list twice. Each group was allocated 15 minutes to study the list. One group was required to memorise the words in a quiet room, while the second group was required to memorise the words while listening to rock music. The third group was required to memorise the words while listening to classical music. The groups were then tested on their recall of the nonsense syllables. The researcher found that there was a marked difference between the groups, with the first group performing much better than the second, and the third performing at a level slightly higher than the second. His calculations found that the result was significant at the 0.05 level.

Question 1

Suggest a way that the researcher may present the result using descriptive statistics.

Sample response

A graph or table showing mean scores for each group would be appropriate.

1 mark

Tips

- *Descriptive statistics are used to analyse, organise and summarise data. Any form of graph would be appropriate.*
- *With more information you may be able to determine whether the mean, median or mode would be more appropriate but in this case it would be acceptable to nominate the mean.*

Question 2

Write an operational hypothesis for this research.

Sample response

That participants who study a list of nonsense syllables for 15 minutes, by firstly repeating the syllables aloud five times, and then writing the list out twice, in a quiet environment, will recall more nonsense syllables, when tested, than participants who listen to music while studying the list.

2 marks

Tip

- *The operational hypothesis must identify the dependent and independent variables, the precise method and how the dependent variable will be measured. It should also indicate the direction of the change expected in the DV.*

Question 3

- 3a.** Identify the type of research design that this researcher has used. Identify **one** disadvantage of this research design.

Sample response

Type of design: The independent groups design (or between-participants design).

Disadvantage: This design does not control for participant-related characteristics that may affect the dependent variable.

2 marks

- 3b.** Name and describe an alternative research design method. What is **one** advantage of this alternative design?

Sample response

Type of design: Matched-participants design. This involves selection of pairs (or trios in this case) of participants who are very similar in a characteristic that may affect the dependent variable. Each member of the pair or trio is then allocated to different groups.

Advantage: Participant-related characteristics, for example IQ, may be controlled for.

3 marks

Tip

- *The repeated-measures design will also control for participant-related variables such as IQ, but in this particular research there may be order effects which would act as a confounding variable. Also, the repeated-measures design would not be ideal with three groups.*

Marks

- *1 mark is allocated for naming the design, 1 mark for describing it, and 1 mark for stating an appropriate advantage.*

Question 4

Identify the control and experimental groups for this experiment.

Sample response

Control: No music

Experimental: Studying while listening to music

1 mark

Marks

- *Note that to be awarded the mark both groups must be identified.*

Question 5

Explain what is meant by the statement that the results were significant at the 0.05 level.

Sample response

The results were found to be statistically significant which means that the difference in mean scores was most likely (or probably) due to the influence of the independent variable and not due to chance.

The 0.05 level means that in five out of 100 repetitions of the experiment the result would be due to chance, or in 95% of repetitions the result would be replicated.

2 marks

Question 6

What was the dependent variable in this experiment?

Sample response

The test result – the number of correctly recalled syllables.

1 mark

Tip

- *Take care to read the question carefully. It would be an easy mistake here to nominate the IV instead.*

Question 7

Identify and explain **two** ways in which the research conducted by Watson and Rayner (1920) on Little Albert, would breach the participant rights which are stipulated in the ethical requirements of psychological research.

Sample response

Informed consent – Little Albert's mother was not fully informed of the method and aims of the experiment and therefore did not give permission based on full information.

Confidentiality – Little Albert's name and photographs were published so his right not to be identified was breached.

4 marks

Tip

- *Note here that the question specifically refers to participant rights, not to ethical principles as was referred to in Question 44 in Section A. There is a difference between these two in that the participant rights are more specific and come under the general principle of beneficence.*

END OF SAMPLE RESPONSES