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**2018**

**TRIAL EXAMINATION**

**VCE PSYCHOLOGY**

**UNITS 3&4**

**ASSESSMENT GUIDE**

**IMPORTANT NOTE**

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#### Section A – Multiple choice questions

**Question 1**

Which branches of the nervous system are involved in the action of the *freeze* response?

**Answer: C.** Somatic and parasympathetic.

**Question 2**

Which of the following is a **not** a function of the *autonomic nervous system*

**Answer: A.** it enables us to perceive an object or event as a potential threat.

**Question 3**

During the initial stages of responding to a stressful event, which of the following are likely to occur?

**Answer: D.** the heart-rate increases and release of cortisol decreases.

**Question 4**

Svend was not wearing a cycle helmet when he fell from his bike. He cracked his head against the pavement. At hospital an MRI scan revealed damage to his left cerebral hemisphere.

Damage to the left cerebral hemisphere is likely to cause problems with

**Answer: C.** sensation in the right side of the body and movement of the right side.

**Questions 5 & 6 refer to the information below**

A psychology researcher is interested in finding the reasons that some students like to listen to music whilst they study, whilst others prefer to study in silence. He is using members of his university psychology class as participants. He has received ethics approval for the study.

He advises participants that they do not need to take part unless they wish to and that they may discontinue their involvement at any stage. He gets them to sign a document indicating that they are willing to participate and assures them that no identifying information will be included in the report.

**Question 5**

Which of the following ethical guidelines has **not** been covered by the researcher?

**Answer: D.**informed consent from participants.

**Question 6**

If another psychologist wanted to use the data for a project later in the year, what would the second researcher need to do to fulfil the necessary ethical guidelines?

**Answer: B.** get approval from the ethics committee and obtain permission from each member to use the data in a second study after explaining what the new study will be about

**Question 7**

Which of the following is an accurate statement about neurotransmitters?

**Answer: A.** Neurohormones and neurotransmitters are chemically distinct.

**Question 8**

As Parkinson’s Disease progresses, which of the following would be experienced only in the later stages?

**Answer:** **A.** Difficulty with walking and balance.

**Question 9**

When the new Skyrail was being constructed near his house Steve, a night-shift worker, could get little sleep during the day. The construction took several weeks and towards the end of this time Steve continually became ill with colds, ‘flu and other infections.

The reason for his long-term health problems is probably that

**Answer: B.** his immune system functions less efficiently because it is being forced to eliminate hormones such as adrenaline and cortisol which are released during arousal.\*

**Question 10**

Jim has used a computer program that taught him to touch-type. At first he needed to shut himself in his room in silence whilst learning. A year later, he can sit at the kitchen table and talk to his mother whilst typing out the notes from his lessons.

This indicates that, for Jim, typing was originally

**Answer: D.** a controlled process that required selective attention.

**Question 11**

Susie’s family has moved from Melbourne to Sydney where Susie has immediately started Year 11 at a new school. For the first few weeks of living in Sydney, Susie feels stressed and has difficulty sleeping. The likely type of stress suffered by Susie is

**Answer:** **A.** acculturative stress.

**Questions 12, 13, 14 & 15 refer to the following scenario**

Sarah, John and James are among five applicants short-listed for two available jobs – each of them has been invited for an interview with some executives from the company and each of them has the interview next week.

They are all really anxious about the impending appointments.

To deal with their anxiety, each of them tries a different strategy.

Sarah spends an hour writing out the type of questions she expects to be asked and gets one of her friends to act as the interviewer and she works out appropriate responses to the questions.

John works out for 30 minutes in his home gym, has a shower and feels relaxed, he then reads up all he can about the company on its website.

James goes for a six hour ride on his bike.

By the end of the day, none of the three is feeling anxious.

**Question 12**

Which coping strategy was being used by each of the students?

**Answer:**

|  |  |  |
| --- | --- | --- |
|  | **Sarah** | **James** |
| **D.** | Problem-focused - Approach | Emotion-focused – Avoidant |

**Question 13**

Predict the likely level of anxiety for each person the following morning

**Answer:** **A.** Sarah and John reduced; James the same or elevated.

**Question 14**

Why did John feel less anxious after his workout and shower?

**Answer: D.** All of the above helped reduce his level of anxiety.

**Question 15**

For the person with “… the same or elevated” level of anxiety, which of the following explains this feeling?

**Answer: A.** (S)he had temporarily addressed the feelings but the cause of the anxiety remained the same.

**Questions 16 and 17 refer to the information below:**

Jock is doing VCE Music Performance Solo. He has one particularly complex piece that he must play for his exam on the clarinet.

At first he becomes really upset, because he feels that he will never be able to play it properly, but he practises each day, over and over again.

Within a couple of months his fingers seem to fly into the correct position, his breathing finds a natural rhythm and his lips and tongue coordinate beautifully.

**Question 16**

The neurological process that has been involved in this learning is

**Answer:** **A.** long-term potentiation, in which new connections between neurons have been created.

**Question 17**

After his exam, Jock doesn’t play that piece for several weeks; when he decides to try it again, he finds that his performance is not as good as previously.

The neurological process that may have contributed to his difficulty is

**Answer:** **B.** long-term depression, in which unused synapses have been destroyed (pruned).

**Question 18**

Roger always puts on his jacket before he goes outside and drives to the shops. Before leaving the house, he gives his dogs a dried meat treat. Now, every time he puts on his jacket, the dogs go and sit near the cupboard where the treats are stored!

This behaviour can be explained by

**Answer: B.** classical conditioning, where putting on the jacket is the conditioned stimulus.

**Question 19**

According to Bandura, the correct sequence of stages in observational learning is:

**Answer:** **D.** The learner being capable of performing the model’s action.

**Questions 20 and 21 refer to the information below**

Jimmy is three years old. One day when his mother took him to the supermarket, he noticed a box of Chuppa-Chups and screamed over and over “Want a lollipop; Want a lollipop!” his mother was embarrassed by the noise and gave him a Chuppa-Chup to suck – Jimmy became quiet immediately! After this had happened again, Jimmy started to yell “Want Lollipop, Want Lollipop!” whenever they approached the supermarket door and his mother gave him a Chuppa-Chup as soon as she could.

Jimmy’s mother took him to a Spotlight store and as they approached the door, Jimmy began to yell “Want Lollipop, Want Lollipop!”

**Question 20**

Why did Jimmy yell “Want Lollipop, Want Lollipop!” when they approached the Spotlight store?

**Answer: C.** The supermarket door was the antecedent stimulus which Jimmy had generalized to include the Spotlight door.

**Question 21**

What is likely to happen if Jimmy’s mother regularly takes him to Spotlight, but never gives him a Chuppa-Chup when he yells out?

**Answer: A.** Jimmy’s yelling “Want Lollipop, Want Lollipop!” will cease due to extinction.

**Questions 22 and 23 refer to the following information**

Cindy was very excited to be going to Italy for a holiday. She decided to learn the Italian names for all the different foods that she enjoys the most. She made a list of forty different foods and learned them all.

Cindy has now been back from holiday for six months and she decides to try to remember as many of the Italian food-names as possible. First she takes a piece of paper and tries writing the Italian words, but she has to stop when she has 22 of them listed.

Next, she takes an Australian cookery book and turns the pages, trying to remember the Italian name of the pictured foods. This time, she can remember 32 of the words.

**Question 22**

Which measure of retention was Cindy using when she first tried to write out the list?

**Answer:** **D.** Free recall.

**Question 23**

Which measure of retention was Amber using when she tried to write out the list using the team photograph to help?

**Answer: C**. Cued recall.

**Question 24**

When a serial position effect shows both the primacy and recency effect, it is most likely that the words were required to be recalled

**Answer: D.** immediately after learning; in random order.

**Question 25**

The part of the temporal lobe most involved with the formation of new declarative memories is the

**Answer: A.** hippocampus.

**Question 26**

Vahn had been on a flight from Europe to Melbourne. When he arrived he called his girlfriend, Shayna, as he walked towards the long-term car park to collect his car.

“Did you sleep on the plane?” she asked.

“No, I’ve been awake for 24 hours!” he replied.

“Well, be very careful!” advised Shayna “Your reactions will be badly affected!”

The effects of sleep deprivation on Vahn would be equivalent to what level of blood alcohol (BAC)?

**Answer: C.** .10

**Question 27**

When Vahn arrived safely home, Shayna said “I know you need a good sleep, but could you first just help me work out how to solve this accounting problem for my university assignment?”. Vahn does this and then opens his bag and sorts his clothes into ‘clean’ and ‘dirty’ piles so that he can drop them in the laundry basket as appropriate.

With which task is Vahn likely to have most difficulty?

**Answer: B.**  Sorting out his clothes.

**Question 28**

Which of these tasks would be most difficult if a person is in an altered state of consciousness?

**Answer: B.** Judging how much time has passed since they had breakfast.

**Question 29**

People sometimes attempt to change their level of consciousness by using medications, illegal drugs or food containing psycho-active substances.

Which of the following correctly pairs a substance and its effects on a person who takes it?

**Answer: C.** Stimulants; increase nervous system activity.

**Question 30**

Jacqui is undergoing an EEG as she is practising meditation.

At this stage, the EEG will probably be showing

**Answer: B.** beta and alpha waves.

**Question 31**

EEG, EMG and EOG are all used to establish a person’s level of consciousness. When in a deep sleep, a person would show

**Answer: B.** low levels of electrical activity on all three machines.

**Question 32**

There are several theories of why we sleep. Which of the following does **not** provide evidence in support of the ‘Evolutionary Theory’?

**Answer: D.** Athletes will sleep approximately an extra 90 minutes the night they have run a marathon.

**Question 33**

During sleep, we go from wakefulness, through deeper and deeper stages on N-REM sleep and then back up through stages 3 and 2 of N-REM to be in REM sleep. From beginning to end this sleep-cycle lasts approximately

**Answer:** **C.** 90-100 minutes.

**Question 34**

If deprived of sleep for one day, it is likely that a normal healthy adult will experience

**Answer: B.** microsleeps.

**Question 35**

Alvin is ten years old, by the time he is 15 it is likely that, when on holiday, he will be

**Answer:** **A.** Going to bed later and sleeping much later.

**Question 36**

In researching the relationship between dreaming and anxiety disorder, the researcher asks participants to keep a ‘sleep diary’ and record their dream content.

The ‘self-fulfilling prophecy’ is a problem in research. This term describes a form of confounding variable that occurs when

**Answer:** **B.** participants distort subjective responses to give the experimenter the information they believe is expected.

**Question 37**

The restoration theory of sleep suggests that animals (including humans) sleep because this is the time that body and mind recover, to be ready for the following day. Which of the following is a criticism of the restoration theory of sleep?

**Answer:** **C.** People who do not exercise show the same sleep-patterns as those who are very active.

**Question 38**

Which of the following is an accurate statement regarding the sleep pattern of a normal healthy adult?

**Answer: B.** They will sleep for about eight hours per night and about 20% of this will be REM sleep.

**Question 39**

A mental health issue would be considered a mental disorder if

**Answer: D.** it prevented the patient from functioning normally.

**Question 40**

If a person possesses *resilience* it means that they are able to

**Answer:** **C.** recover after set-backs.

**Question 41**

The biopsychosocial approach to mental health is considered to be “best practice” because it

**Answer: B.** identifies the specific needs of the individual and matches diagnosis and treatment to those needs.

**Question 42**

Cognitive Behavioural Therapy (CBT) is a psychotherapeutic technique that involves

**Answer: D.** All of the above strategies are involved in CBT.

**Question 43**

Which of the following correctly pairs protective factors with their area of influence?

**Answer: C.** Resilience training: psychological.

**Question 44**

*N.B. This information is true!*

Recent research has uncovered documents that show that the mother of “Little Albert” was paid US $1.00 per day to allow “Little Albert” to take part in Watson’s experiment!

This means that

**Answer:** **D.** the experiments were unethical because Albert was exposed to potential psychological harm.

**Question 45**

If Watson had continued to present the white rat to Albert, but never again paired it with a loud noise, it is most likely that

**Answer:** **C**. Albert’s fear response, when presented with white objects, would be extinguished.

**Question 46**

Biological factors that influence the likelihood that a person will suffer a phobia include

**Answer: C.** genetic predisposition.

**Question 47**

Which of the following phobias is likely to be most resistant to treatment by systematic desensitisation?

**Answer: D.** Fear of heights.

**Question 48**

In addition to CBT, medication is often used to help treat phobias. The most commonly used medications are those that

**Answer: A.** increase the effects of GABA.

**Question 49 and 50 refer to the information below**

Simon loves the excitement of betting on horse-races but his wife, Carla, is expecting a baby and she is worried that they won’t have enough money when the baby is born.

“Don’t worry!” said Simon, “I have a plan on how to quit - I won’t bet after the baby is born.”

**Question 49**

According to the transtheoretical model of behavior change, Simon is in the

**Answer: B.** preparation stage.

**Question 50**

When his son has been born, Simon decided to keep his promise, closed his betting account, did not look at the form-guides in the newspapers and put the amount of money he would normally have bet on horses into a special money box.

According to the transtheoretical model of behaviour change Simon would now be in the

**Answer: A.** action stage.

**SECTION B – Short answer section:**

*As long as the meaning of a word is clear and unambiguous, marks are not deducted for spelling errors* ***except*** *as specified in this guide.*

*Where part of a sample answer is shown in parentheses, it is for information and would not be required in a student response.*

**Question 1**

Taxi controller-manager, Sasha, is preparing the rosters for the drivers for the next month. Each car is used 24 hours seven days a week. Because certain times of day are busiest and drivers earn a percentage of the fares, it is important to make sure that all drivers share equally in day (8.00am to 4.00 pm), evening (4.00pm to midnight) and night shifts (midnight to 8.00am).

1. To be most efficient and to keep morale high, if driver George worked the day shift this month, which shift should he be rostered on to for next month? 1 mark

**Answer:** *Evening shift*

**Marking Protocol:**

**1 mark:** Response as above

1. Explain why this is the best shift for George next month. 3 marks

**Answer:** *Because the natural circadian rhythm is longer than a day (approx. 25 hours) it is easier to adjust to a longer day (moving forwards) than a shorter day. Moving from day- to evening-shift makes the time he is awake longer when the change occurs.*

**Marking Protocol:**

**1 mark:** For natural circadian rhythm over 24 hours.

**1 mark:** For easier to adjust to lengthened day.

**1 mark:**  For the change from day- to evening-shift provides this lengthening of the day.

**Question 2**

It is possible that an altered state of consciousness (ASC) can be identified from *perceptual and cognitive distortions*. Explain this statement and give an example. 2 marks

**Answer:**

Explanation: *In an ASC a person’s perception of pain may be altered.*

Example: *A person who is drunk may injure themselves and be unaware of it until the next day.*

**Marking Protocol:**

**1 mark:** For appropriate explanation.

**1 mark:** For appropriate indication that pain or other perception may be distorted in ASC.

**Question 3**

Masie is being assessed for her levels of stress and is attached to an EMG, an EOG and an EEG. At the moment, she is in a state of anxiety, caused by being shown photographs of dangerous spiders.

**a.** What is measured by an EMG? 1 mark

**Answer:** *The level of electrical activity in muscles of the body.*

**b.** What will an EMG show while Masie is in this state? 1 mark

**Answer:** *Moderate (or high) levels of electrical activity.*

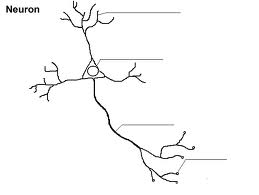
**c.** At the same time, what is the EEG likely to show? 1 mark

**Answer:** *Beta waves (probably with some gamma waves).*

**Marking protocol:**

**1 mark:** Response as above for each of **a., b., & c.**

**Question 4**

 On the simplified diagram of a neuron (above) label the parts indicated 2 marks

**Answer:** (top to bottom) *Dendrite: Soma or Cell body or Nucleus; Axon; Axon terminal (terminal button etc)*

**Marking Protocol: ½ mark –** For each structure correctly labelled. (Rounded up.)

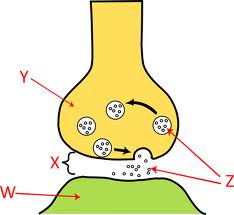
1. What is the function of the myelin sheath? Which of the structures that you labelled would be most affected by myelination? 2 marks

**Answer:** *The myelin sheath is a form of insulation. The axon would be most affected.*

**Marking protocol:**

**1 mark:** For each of the above points.

**Question 5**

****

With reference to the diagram of a synapse (above) describe what happens as a neural impulse is transmitted from one neuron to another.

Include reference to the “lock and key” mechanism in your answer. 4 marks

**Answer:** *From the axon terminal (Y) of the pre-synaptic neuron (top) a neural impulse causes release of molecules of neurotransmitter (Z). These molecules travel across the synaptic cleft (gap)* ***(X)*** *and act as* ***keys*** *as they fit into receptor sites* ***(locks)*** *on the membrane of the dendrite of the post-synaptic neuron* ***(W).*** *(The key engages the lock and opens a ‘gate’ allowing charged particles to enter and raise the electrical charge (potential) on the dendrite of the post-synaptic neuron).*

**Marking protocol: 1 mark each:**

For correctly identifying **and** giving function of X and Y.

If ‘Lock’ and ‘Key’ are not correctly explained for W & Z, only one mark is awarded for correctly identifying **and** giving function of W and Z.

**Question 6**

1. On the axes below draw a diagram of Selye’s General Adaptation Syndrome (GAS). Label all stages. 3 marks

****

**Marking protocol: 1 mark** for each STAGE (Alarm; Resistance; Exhaustion)

1. If the stressor continues to the final stage, what are some likely outcomes? Give examples. 2 marks

**Answer:** *In the exhaustion stage a person is in danger of mental and physical breakdown. For example, depression infections from reduced immunity.*

**Marking protocol:**

**1 mark:** Indication of depleted resources to deal with stressors.

**1 mark:** Two specific examples of mental and/or physical problems

**Question 7**

1. Suzie is about to commence Year 12. She is experiencing a level of arousal caused by positive feelings about the coming year.

Indicate the way in which Lazarus and Folkman’s model may have applied to Suzie’s situation:

1 + 1 = 2 marks

1. Primary appraisal.

**Answer:** *Suzie is experiencing* ***Eustress*** *and has interpreted the imminent Year 12 experience as a* ***challenge****.*

**Marking protocol:**

1. **mark for:** Eustress **or** Any positive appraisal
2. Secondary appraisal.

**Answer:** *Suzie has considered what the year will bring and is confident that she has the resources to deal with it.*

1. **mark for:** Confidence because of resources.
2. Sophie is also about to commence Year 12. She is experiencing a level of arousal caused by negative feelings about the coming year.

Indicate the way in which Lazarus and Folkman’s model may have applied to Sophie’s situation:

1 + 1 = 2 marks

1. Primary appraisal.

**Answer:** *Sophie is suffering* ***distress****. She has appraised the year as a* ***threat.***

**Marking protocol:**

1. **mark for:** Distress **or** Any negative appraisal

1. Secondary appraisal.

**Answer:** *Sophie has considered what the year will bring and believes that she does not have the resources to deal with it.*

**Marking protocol:**

1. **mark for:** Inadequate resources

**Question 8**

*(N.B. This was a real event, 5/5/1992, Bastia - Corsica)*

In 1992, when Pierre was 16, he attended a football game on the French island of Corsica.

He witnessed the horror of the disaster when, just before the game was due to start, one of the stands collapsed leaving 18 people dead and over 2000 injured.

Over twenty-five years later, Pierre still has graphic visions of the disaster that come back to him every time he sees an old-fashioned spectator stand at a country football ground.

Explain what has happened to Pierre in terms of the formation of this graphic memory and identify the reason for it recurring when he sees similar structures. 4 marks

**Answer:** *Pierre is re-living a personal experience (episodic memory). The memory is so vivid because of the extreme surge of adrenaline he experienced, creating a flashbulb memory (and the amygdala linking the emotion of fear/horror to the memory). This memory returns to him when he sees similar structures because of context-dependent cues (the external environment stimulating recall).*

**Marking protocol:**

**1 mark:** Context-dependent cues identified.

**1 mark:** For each of the underlined terms in the above response – to a maximum of three.

**Question 9**

1. Using examples, explain the meaning of the terms *stimulus generalisation* and *stimulus discrimination* as they apply in **classical conditioning**. 4 marks

**Answer:** *Stimulus generalisation.*

*When Watson conditioned Albert to experience fear, the Neutral Stimulus (which became the Conditioned Stimulus) was the white rat. Later, Albert showed fear of many different white, fluffy objects.*

*Stimulus discrimination*

*If Watson had presented a white object e.g. a white rabbit on many occasions, but never paired it with a frightening stimulus, Albert is likely to have stopped fearing the rabbit, but still feared the rat.*

**Marking protocol**

**4 Marks:** Both generalisation and discrimination correctly explained and exemplified

**3 Marks:** Either generalisation or discrimination correctly explained and one exemplified

**2 Marks:** Either generalisation and discrimination correctly explained **or** exemplified

**1 Mark:**  One term explained **or** exemplified

1. Using examples, explain the meaning of the terms *positive reinforcement* and *response cost* as they apply in **operant conditioning**. Make sure that you demonstrate the essential differences between these concepts. 4 marks

**Answer:** *Response cost and Positive reinforcement both refer to the ‘Consquence’ in the three phase model of Operant Conditioning.*

*If a behaviour is rewarded by being given something that is pleasant and desired – such as receiving a payment for working for a week, then the behaviour is more likely to be repeated and positive reinforcement has occurred.*

*If a behaviour, such as speeding when driving a car, leads to the removal of something that is pleasant and desired, such as money (a fine) then the behaviour is less likely to be repeated and response cost has occurred.*

**Marking protocol:**

**1 mark:** Response cost explained.

**1 mark:** Positive reinforcement explained.

**1 mark:** Response cost appropriate example.

**1 mark:** Positive reinforcement appropriate example.

**Question 10**

**a.** Give two conditions in modelling that decrease the likelihood that a child will imitate the model’s behaviour. 2 marks

**Answer:** *The more distant the relationship between the model and the learner, the less likely that the learner will imitate the model.*

*If the child has seen the model punished for the behaviour, imitation is less likely.*

**Marking protocol:**

**1 mark:** For either of the above points (or other appropriate point made)

**b.** Lucy wishes to teach her five-year-old niece Chloe how to make her bed, using observational learning. Outline what Lucy should do at each of the stages to teach Chloe. 5 marks

**Answer:** *Attention****:*** *Lucy should make the bed several times, whilst ensuring that Chloe is watching carefully (talking through the actions as she does them would be useful).*

*Retention: Lucy should ask Chloe to imagine how it will feel as she tucks in the sheets etc..*

*Reproduction: Lucy should give Chloe confidence that she will be able to remember how to make the bed and that she has the strength and physical ability to do so.*

*Motivation: Lucy should encourage Chloe to attempt to make her bed in the morning.*

*Reinforcement: When Chloe has made her bed, Lucy should praise her.*

**Marking protocol:**

**1 mark:** For each of the underlined stages above appropriately identified.

**Question 11**

Ming has been diagnosed with Generalized Anxiety Disorder.

.

1. Complete the table below with at least one appropriate entry in each cell, to show how different factors might be influencing Ming’s mental health. 7 marks

|  |  |  |  |
| --- | --- | --- | --- |
|  | Biological | Psychological | Social |
| Predisposing Risk  Factors | *Genetic factors* | *Personality characteristics* | *Isolation* |
| ***Precipitating Risk***  ***Factors*** | *Malnutrition* | *Emotional abuse or*  *neglect* | *Stressful life*  *circumstances* |
| Perpetuating Risk  Factors | *Use of alcohol or*  *drugs* | *Attachment issues* | *Low self-efficacy* |
| ***Protective***  ***Factors*** | *Physical fitness* | *High self-awareness* | *Strong support*  *network* |

**Marking protocol:**

**½ mark:** For an appropriate entry in each of the 14 remaining cells in the table – rounded up

1. Using information from the table you completed above, explain the concept of *cumulative risk*.2 marks

**Answer:**  *Cumulative risk. The overall effect may be much greater than might appear because of interactions among the factors to magnify the effect of each one.*

**Marking protocol:**

**1 mark for each of:** Interaction among factors . Magnifying effects.

**Question 12**

Margaret is a Grade 1. Teacher at Riverside Primary School, who is studying for a master’s degree in psychology.

She believes that children who have high quality sleep each night will be able to learn to read more quickly than their classmates who have lower quality sleep each night.

There are 72 children in Grade 1 at her school and Margaret puts a notice in the newsletter outlining her proposed research and asking all parents to sign and return a permission slip, consenting to the participation of their children – 65 families agree to take part.

Each parent is then asked to keep a ‘sleep diary’ for their participating child for one week each month for the next six months.

From the sleep diaries, Margaret discovers that there are two clear groups of children: those who have 10 hours or more of uninterrupted sleep each night and those who have less than 10 hours of uninterrupted sleep each night.

In the first week of the school year, Margaret tests the reading age of each child in years and months. She repeats this assessment at the beginning of Term 3.

The results of Margaret’s research are shown below:

Average age of children: Term 1: 6 years 8 months; Term 3: 7 years 2 months

|  |  |  |  |
| --- | --- | --- | --- |
|  | Average Reading age Term 1 | Average Reading age Term 3 | Increase in reading age Term1 – Term 3 |
| Poor Sleep < 10 hours per night | 6 years 9 months | 7 years 3months | 6 months |
| Good Sleep ≥ 10 hours per night | 6 years 10 months | 7 years 6 months | 8 months |

1. What sampling technique did Margaret use? 1 mark

**Answer:** *Convenience sampling*

**Marking protocol: 1 mark:** As above

1. What experimental design was Margaret using? 1 mark

**Answer:** *Repeated measures*

**Marking protocol: 1 mark:** As above

1. What is an advantage of this design? 1 mark

**Answer:** *It eliminates the confounding effects of participant variables (differences among participants)*

**Marking protocol: 1 mark:** As above

1. In operational terms, state the Independent Variable (IV) and the Dependent Variable (DV)

2 marks

**Answer:** *IV: Good sleep: Good Sleep ≥ 10 hours per night*

*OR*

*Poor Sleep < 10 hours per night*

*DV: Change in reading age over six months*

**Marking protocol: 1 mark:** For each of the above

1. State a possible conclusion from Margaret’s results. 1 mark

**Answer:** *That Grade 1 children at Riverside Primary School who have high quality sleep learn to read faster than those who have poor quality sleep.*

**Question 13**

You are a member of a team that has the task of preparing a booklet for all students who are about to begin their VCE studies.

Your section has the title: **MAKING THE MOST OF MEMORY!**

Using the headings given, complete the outline below.

Examples will be useful to help them understand.

Dot-points are an acceptable format. 10 marks

**Answer:**

WHAT IS MEMORY?

*Memory is an information processing system that enables the encoding, storage and retrieval of information. It also involves the retention of physical skills.*

THE DIFFERENT REGISTERS OF MEMORY AND THEIR FEATURES

*Sensory Memory:*

* *Occurs in sense organs*
* *Information is in raw form (not processed)*
* *Short duration (Visual <0.3 seconds)*
* *Large capacity (look at a scene, close your eyes and the whole scene remains)*
* *Loss by decay (after a moment that scene will disappear)*
* *To transfer to Short-term memory, we must pay* **attention** *to stimuli*

*Short-term memory*

* *Limited duration (12-20 seconds)*
* *Limited capacity (5-9 items)*
* *Information lost by displacement or decay*
* *Increase capacity by ‘chunking’ (e.g. remember Mobile number as XXXX XXX XXX, not XXXXXXXXXX)*
* *Increase duration by ‘maintenance rehearsal’*
* *To transfer to Long-term memory must be encoded using ‘elaborative rehearsal’*

COMMITTING TO MEMORY – REHEARSAL

*Maintenance rehearsal – to remember for a short time. (e.g. repeat a phone number until you’ve dialed it)*

* *Repeat over and over* **without** *adding meaning and* **without** *linking to material in LTM.*

*Elaborative rehearsal – to remember for a long time*

* *Repeat over and over* **whilst** *adding meaning and* **whilst** *linking to material in LTM. (e.g. a new model of car – it looks like a cross between a KIA Sportage and a Jeep Cherokee)*

TYPES OF LONG-TERM MEMORY

*Declarative – Memory ‘That…’*

* *Episodic – memory linked to personal experience (e.g. The last concert you attended)*
* *Semantic – memory of facts (Blue whales are the largest mammals on Earth)*

*Procedural – Memory how to …*

* *Memory for physical skills (how to type; how to kick a drop punt; how to drive a car)*

RETRIEVING FROM MEMORY (HOW CUES CAN HELP)

*Context cues*

* *We remember better if we retrieve in the same environment as where learning occurred (studying in the school library where you will take exams can help retrieval)*

*State-dependent cues*

* *We remember better if we are in the same emotional state as when learning occurred (Try not to be anxious in an exam – you were not anxious when you were studying).*

BEWARE! MEMORIES ARE NOT ALWAYS ACCURATE

*Memories – especially for events – are reconstructive.*

* *If we have re-visited a memory, we don’t remember the actual event, we remember what we thought it was the last time we remembered it, and this may change over time. (Holidays when you were little. Get out some old photographs; Is that exactly what you remembered?)*

**Marking protocol:**

Students adequately address each of the content items.

Students use appropriate examples.

9-10 marks: A standard that is the highest expected from a VCE student.

7-8 marks: A standard to be expected of no more than 30% of VCE students.

5-6 marks: All criteria are addressed at an adequate level for a VCE student.

3-4 marks: Some criteria are inadequately addressed.

1-2 marks: Only one criterion adequately addressed or all are poorly addressed.

0 marks: No criterion is appropriately addressed.

This response to be assessed according to the following criteria:

* Identification and explanation of formal psychological terminology relevant to the question.
* Use of appropriate psychology terminology.
* Discussion of relevant psychological information, ideas, concepts, theories and/or models and the connections between them.
* Analysis and evaluation of data, methods and scientific models.
* Drawing of evidence-based conclusions and explanation of limitations of conclusions.