**A blue text on a black background

Description automatically generated**

PSYCHOLOGY - UNIT 3

Unit 3 Semester 1 2024

Marking Key

Marking keys are an explicit statement about what the examining panel expect of candidates when they respond to particular examination items. They help ensure a consistent interpretation of the criteria that guide the awarding of marks

Copyright © Academic Associates 2024

**Question 1 (25 marks)**

(a) (i) Define the term ‘sensation’. (1 mark)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Process of stimulus being detected and converted into electrochemical messages/energy | 1 |
| **Total** | **1** |

(ii) Complete the table below to describe the **three** steps in the process involved in sensation applied to Ollie’s sense of smell. (4 marks)

|  |  |  |
| --- | --- | --- |
| **Steps** | **Description** | **Marks** |
| **1: Reception** | The smell/airborne stimulus is received by the olfactory receptors. | 1 |
| **2:** Transduction | **Incoming smell is converted to an electrical signal (action potential).** | 1 |
| **3:** Transmission | The olfactory signal is transmitted by neurons/nerves to the brain/part of brain responsible for interpreting smell. | 1-2 |
| **Total** | | **4** |
| Note: Answer must be in context of smell to receive marks. | | |

(b) (i) Define the term, ‘perception’ (1 mark)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| The process of interpreting and organising sensory information to form mental representations/meaning. | 1 |
| **Total** | **1** |

(ii) Explain how Ollie has perceived the unpleasant taste of the coriander. (3 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Ollie has selected the taste of the coriander from the sensory information received | 1 |
| He has organised the information about the flavour based on previous experiences | 1 |
| He has interpreted the taste as unpleasant | 1 |
| **Total** | **3** |

(c) Identify the population and sample for this study. (2 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| **Population:** gifted and talented adults | 1 |
| **Sample:** gifted and talented first year university students | 1 |
| **Total** | **2** |

(d) Name and describe the method used to select the participants. (2 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Convenience sampling | 1 |
| Participants were selected from the same university as the researchers/where the researchers worked | 1 |
| **Total** | **2** |

(e) Name the type of attention being tested in Group 2 and give a reason for your response. (2 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Divided attention | 1 |
| There was more than one stimulus presented at the same time | 1 |
| **Total** | **2** |

(f) (i) State the calculation for a mean score. (1 mark)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| The sum of all data divided by the number of participants | 1 |
| **Total** | **1** |

(ii) State one disadvantage of using a mean score when processing data. (1 mark)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Extreme scores/outliers can skew the results | 1 |
| **Total** | **1** |

(g) (i) Name the sampling method applied to the second round of the research.

(1 mark)

|  |  |
| --- | --- |
| **c** | **Marks** |
| Snowballing | 1 |
| **Total** | **1** |

**Question 1** (continued)

(ii) Outline why this method would be applied to the population for this study. (3 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Gifted and talented adults represent a small/niche part of the adult population | 1 |
| It is likely that the original participants will find it easier/quicker to recruit new participants | 1 |
| because they know them/have easy access to them | 1 |
| **Total** | **3** |

(h) Evaluate the results of this research in terms of reliability. (4 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| The results show a high level of reliability | 1 |
| Research conducted multiple times | 1 |
| And in different locations | 1 |
| Produced similar results | 1 |
| **Total** | **4** |

**Question 2 (26 marks)**

(a) (i) Identify the theorist who conducted a study into classical conditioning using dogs. (1 mark)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| (Ivan) Pavlov | 1 |
| **Total** | **1** |

(ii) Referring to the dog study, identify the unconditioned response and unconditioned stimulus: (2 marks)

|  |  |  |
| --- | --- | --- |
| **Description** | | **Marks** |
| **Unconditioned stimulus** | food | 1 |
| **Unconditioned response** | salivation | 1 |
| **Marks** | | **2** |

(iii) Outline the role of the neutral stimulus in classical conditioning with an example from the dog study. (3 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Stimulus that does not lead to any change of behaviour/physiological response | 1 |
| In Pavlov, this was the metronome/bell | 1 |
| The dogs had no reaction when they heard the sound before conditioning occurred | 1 |
|  | **3** |

(b) Describe the **two** classical conditioning concepts that can explain why Po has become afraid of the dark and Nat has not. (6 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Generalisation | 1 |
| Po responds to stimuli that are similar | 1 |
| to the original conditioned stimulus | 1 |
| Extinction | 1 |
| Nat has been exposed to the conditioned stimulus repeatedly | 1 |
| Without the unconditioned stimulus | 1 |
| **Total** | **6** |

(c) (i) Define implicit memory. (1 mark)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Recall of unconscious/automatic skills/procedures | 1 |
|  | **1** |

**Question 2** (continued)

(ii) Explain the role of the cerebellum in the storage of implicit memories. (3 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Involved in automatic processes related to memory and movement | 1 |
| Stores information about movements associated with certain actions | 1 |
| Enables a person to coordinate motor action based on past experiences | 1 |
|  | **3** |

(iii) Outline the role of the amygdala in the formation of Po’s memory linked to being afraid of the dark. (4 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Amygdala forms memories that are linked to a strong emotional response/fear responses | 1 |
| Strengthens episodic memories stored in other regions of the brain | 1 |
| Po experienced multiple fear responses | 1 |
| Linked to the (stimulus) of dark places | 1 |
|  | **4** |

(d) Explain the term ‘phobia’. (3 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Anxiety disorder - Involving extreme/intense/panic fear of a situation/thing | 1 |
| Continues over time | 1 |
| That interferes with everyday/daily functioning | 1 |
| **Total** | **3** |

(e) Outline how systematic desensitisation applies principles of classical conditioning to modify behaviour in relation to fear of the dark. (3 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Systematic desensitisation identifies the relationship between the conditioned stimulus (darkness) and conditioned response (fear response) | 1 |
| It creates a new association/conditioning for darkness and relaxation/replaces conditioned response of fear with relaxation | 1 |
| Through a process of graded/gradual exposure | 1 |
| **Total** | **3** |

**Question 3 (22 marks)**

(a) Explain memory in the context of this model. (2 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Memory occurs as a result of processing information | 1 |
| The deeper the processing, the longer a memory will last | 1 |
| **Total** | **2** |

(b) Outline the **two** processes involved in shallow processing and provide an example to illustrate each process. (6 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Structural | 1 |
| Information is encoded based on visible/physical qualities | 1 |
| Accept all relevant examples such as font, layout, colour, shapes | 1 |
| Phonemic | 1 |
| Information is encoded based on sound/auditory information | 1 |
| Accept all relevant examples such as number of syllables, rhyme | 1 |
| **Total** | **6** |

(c) Describe how deep processing would be applied to the memory of the concept ‘happiness’. (2 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| The meaning of the word happiness is encoded semantically | 1 |
| associated with previous/similar experiences/knowledge of happiness that have meaning | 1 |
| **Total** | **2** |

(d) Describe ‘episodic memory’. (2 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Memory of specific events/life experiences | 1 |
| That can be retrieved with conscious effort/ is declarative | 1 |
| **Total** | **2** |

**Question 3** (continued)

(e) Outline the general method applied in Craik and Tulving’s study. (5 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Any **five** of: | |
| * Participants were tested individually * Participants were told the experiment was concerned with perception and speed of reaction. * They were asked a question about different words * Before the word was briefly (200msec) shown to them (using a tachistoscope) * Answers were indicated as either yes or no * Each question represented a different level of processing * An unexpected memory test was given * Response times and accuracy were recorded | 1-5 |
| **Total** | **5** |

(f) Outline the key finding of Craik and Tulving’s (1975) study. (2 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| The deeper information is processed | 1 |
| The more likely it is to be remembered | 1 |
| **Total** | **2** |

(g) Outline free, serial and cued recall in the process of remembering words. (3 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Free recall: memory of as many words as possible in any order | 1 |
| Cued recall: prompts/cues are used to support retrieval of words | 1 |
| Serial recall: memories are retrieved by using lists/order of words in order | 1 |
| **Total** | **3** |

**Question 4 (21 marks)**

(a) Describe Albert Bandura’s (1977) social learning theory. (3 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| People learn by observation | 1 |
| Imitation/Learner | 1 |
| And modelling | 1 |
| **Total** | **3** |

(b) Describe the **first three** elements of the process that must occur for successful observational learning applied to Mee learning how to change oil in the car. (6 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Attention | 1 |
| Mee must be interested/have a reason to pay attention. | 1 |
| Retention | 1 |
| Mee must have the cognitive skills to retain the required information | 1 |
| Reproduction | 1 |
| Mee must have the physical and cognitive capacity to reproduce the skill | 1 |
| **Total** | **6** |

(c) Explain how Mee’s older male cousin and favourite aunt have contributed to the likelihood of Mee feeling motivated to learn the new skill. (3 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| They have provided vicarious reinforcement | 1 |
| The model (Priti) has been praised while Mee is watching | 1 |
| She will be motivated to learn the new skill to receive the same praise | 1 |
| **Total** | **3** |

**Question 4** (continued)

(d) Outline **two** limitations of this study. (2 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Any **two** of: | |
| * Took place in a laboratory rather than natural setting (low in ecological validity) * Sample was not representative of the population (came from the same location/children of university academics or students) * Model and child are strangers which may affect the level of imitation by children * Further studies (Cumberbatch, 1990) found that children who had not played with a Bobo Doll before were more likely be aggressive/novelty value of the doll had an impact on results. * Did not measure long-term effects of the learning. * Children were all one age so it is not possible to identify if the behaviour was age-specific. * Children may have been distressed if not exposed to an aggressive model before. | 1-2 |
| **Total** | **2** |

(e) (i) Name the research design being applied to the study. (1 mark)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Longitudinal | 1 |
| **Total** | **1** |

(ii) Describe this research design applied to the study of aggression. (3 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Measures changes over time | 1 |
| For the same individual | 1 |
| Allows for consistent observation of developmental changes in aggression/aggressive behaviour | 1 |
| **Total** | **3** |

(f) Compare the relationship between being aged16 and 20 and aggression represented in the table above. (3 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| 16 year olds show a strong (1) positive (1) correlation | 1 |
| 20 year olds show a weak (1) negative correlation (1) | 1 |
| 16 year olds were more likely to be aggressive than 20 year olds | 1 |
| **Total** | **3** |

**Question 5 (31 marks)**

(a) (i) Identify the learning theory applied to this study. (1 mark)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Operant conditioning | 1 |
| **Total** | **1** |

(ii) Describe the components of the three-phase model and provide an example to illustrate each component based on aggressive behaviour related to a patient pushing into a long queue for their favourite food at the cafeteria. (6 marks)

|  |  |  |  |
| --- | --- | --- | --- |
| **Component** | **Description** | **Example** | **Marks** |
| **Antecedent** | Event/environmental factor that occurs before a behaviour. | Long queue for patient’s favourite food. | 1-2 |
| **Behaviour** | Any (observable) action that occurs in response to the antecedent/trigger. | Patient pushes into the queue. | 1-2 |
| **Consequence** | The event/effect of the behaviour. | Patient is shouted at (punished) by other patients/Patient (is rewarded) gets their food faster. | 1-2 |
| **Total** | | | **6** |
| Note: accept all relevant examples applicable to the scenario provided.  Consequences can be either a punishment or a reward. | | | |

(b) (i) Identify **one** participant variable that was controlled in the study. (1 mark)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Any **one** of: |  |
| * Participants had to be over the age of 18 * Participants had to be fluent in Dutch * Participants could not be minimally conscious * Participants could not be suffering from post-traumatic amnesia | 1 |
| **Total** | **1** |
| Note: answer must reflect whether patients were included/excluded. | |

**Question 5** (continued)

(ii) Outline how **one** of the uncontrolled participant variables might impact the study. (3 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Reduce/limit/lower validity | 1 |
| Different injuries/age/living conditions mean that you cannot accurately compare the results for all patients | 1 |
| Factors other than the ABC intervention could account for the results. | 1 |
| **Total** | **3** |

(iii) Identify the two groups present in experimental design. (2 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Experimental group | 1 |
| Control group | 1 |
| **Total** | **2** |

(iv) Define ‘random allocation’. (1 mark)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| A technique for selecting participants for control or experimental/either group by chance/out of control of the researchers. | 1 |
| **Total** | **1** |

(v) Explain the purpose for applying random allocation in experimental research. (3 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Random allocation ensures that each participant has an equal chance to be allocated to either group. | 1 |
| It reduces the effect of differences between (and within groups) | 1 |
| So that data can be compared/the results are more likely to be attributed to the effect of the independent variable | 1 |
| **Total** | **3** |

(c) (i) Name the ethical consideration illustrated by appointment of a legal representative. (1 mark)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Informed consent | 1 |
| **Total** | **1** |

(ii) List **three** pieces of information that must be communicated to participants for informed consent to occur. (3 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Any **three** of: |  |
| * Aim/purpose of the study * Method/ nature of intended procedures * Risks/adverse effects/possible disadvantages * Right to withdraw at any time without negative consequence * How information will be collected and recorded * How, where and for how long information will be stored * Who will have access to stored information * Confidentiality and limits to confidentiality | 1-3 |
| **Total** | **3** |
| Note: Accept other relevant answers | |

(iii) State how privacy would be protected for all participants in the study. (1 mark)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Ensure that only information relevant to the research is collected | 1 |
| **Total** | **1** |

(d) (i) Name the method of data collection applied to the nurses and identify the type of data and measurement tool used. (2 marks)

|  |  |  |
| --- | --- | --- |
| **Description** | | **Marks** |
| **Method** | Quantitative | 1 |
| **Measurement tool** | Likert scale | 1 |
| **Total** | | **2** |

(ii) Outline **one** strength and **one** limitation of using this method of data collection. (2 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Strength: Easy to statistically analyse/compare numerical data | 1 |
| Limitation: Responses are limited in detail/to the researchers knowledge/ provide no reasoning for choices | 1 |
| **Total** | **2** |
| Note: accept all relevant answers | |

**Question 5** (continued)

(iii) Identify whether the data collected is subjective or objective and provide a reason for your response. (2 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Subjective | 1 |
| The nurses are being asked for their personal/individual opinion/perception | 1 |
| **Total** | **2** |

(iv) With reference to the feedback scores from the nurses, draw a conclusion for the effectiveness of ABC in the Australian research. (3 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Nurses disagreed that the ABC method was effective | 1 |
| They did not consider/think it an effective method | 1 |
| of improving behaviour for patients with acquired brain injury. | 1 |
| **Total** | **3** |

**End of section one**

# Section Two: Extended Response 30% (53 marks)

**Question 6 (20 marks)**

Write an extended response that must include the following:

* List the **three** components of Baddeley and Hitch’s original working memory model. (3 marks)
* Outline the function of C in the model above. (3 marks)
* Describe the **fourth** feature added to the model in 2000. (6 marks)
* Explain the reason Baddeley and Hitch developed a model of working memory instead of relying on Atkinson and Shiffrin’s (1968) multi-store model to explain short term memory. (2 marks)
* State **two** groups that must be present in an experimental research design. (2 marks)
* Explain why it is important to control extraneous variables in experimental research. (4 marks)

**Question 6** (continued)

|  |  |
| --- | --- |
| **List the three components of Baddeley and Hitch’s working memory model** | |
| Central Executive, Phonological Loop, Visuo-spatial Sketchpad | 1-3 |
| **Subtotal** | **3** |
| **Outline the role of the C in the model above** | |
| Central executive is an attentional system (rather than a memory system) | 1 |
| That directs attention to the task at hand/required information | 1 |
| And filters out irrelevant information | 1 |
| **Subtotal** | **3** |
| **Describe the fourth feature added to the model in 2000** | |
| Episodic buffer | 1 |
| Limited capacity/temporary storage system | 1 |
| Controlled by the central executive | 1 |
| Integrates semantic information from the long-term memory (1) with information in the phonological loop, (1) visuo-spatial sketchpad (1). (Note: award one mark for ‘slave systems’ if they are not individually identified). | 1-3 |
| **Subtotal** | **6** |
| **Explain the reason Baddeley and Hitch developed a model of working memory instead of relying on Atkinson and Shiffrin’s (1968) multi-store model to explain short term memory.** | |
| Multi-store model was oversimplified/only allows for a one way flow of information/is passive | 1 |
| Did not account for the ability of people to accurately recall information, even when undertaking complex/multiple tasks | 1 |
| **Subtotal** | **2** |
| **State two reasons that researchers would choose to apply an experimental research design** | |
| To establish a cause and effect/establish whether the IV causes the changes in the DV | 1 |
| To systematically control extraneous/confounding variables. | 1 |
| **Subtotal** | **2** |
| **Explain why it is important to control extraneous variables in experimental research** | |
| Extraneous variables can affect the results/dependent variable of an experiment | 1 |
| They can create alternative explanations for the results that are not linked to the independent variable | 1 |
| Can impact validity (1) - the experiment may not be measuring what it is intending to measure (1) | 1-2 |
| **Subtotal** | **4** |
| **TOTAL** | **20** |
| Accept other relevant answers. | |

**Question 7 (33 marks)**

In your answer you must:

* Outline the method used in the ‘Skinner Box’ experiments. (6 marks)
* State **two** findings from Skinner’s experiment. (2 marks)
* Evaluate the ethics of Skinner’s experiment in terms of the use of animals in research. (2 marks)
* Describe **two** ethical considerations modern researchers would be required to make for any study using animals. (6 marks)
* Based on your knowledge of the findings of the Skinner Box experiment, propose a directional hypothesis for Dr Miya’s study. (5 marks)
* Explain the ‘experimenter effect’ with reference to Dr Miya’s study. (4 marks)
* Name the cause of memory loss related to trauma. (1 mark)
* List **two** emotional effects associated with this condition. (2 marks)
* Describe the cause of memory loss associated with Alzheimer’s disease. (2 marks)
* Use appropriate psychological terminology (3 marks)

|  |  |
| --- | --- |
| **Outline the method used in the ‘Skinner Box’ experiments** | |
| (Hungry) animal/rat/pigeon is placed in a chamber that isolates it from the external environment. | 1 |
| The chamber has a food dispenser and electric grid/lights/sounds built in | 1 |
| The food dispenser has a lever/button that the animal can activate/press/pull | 1 |
| A reinforcer/punishment is released/activated when the lever/button is pushed. | 1 |
| Animals are initially placed in the chamber to explore freely | 1 |
| Then the reinforcer/punishment is introduced | 1 |
| **Subtotal** | **6** |
| **State two findings from Skinner’s experiment.** | |
| Any two of: |  |
| * Rats/pigeons learned to push the lever/button to receive a reward/stop the unpleasant sensation * Positive/Negative reinforcement increased the animal’s behaviour * Punishment decreased the animal’s behaviour | 1-2 |
| **Subtotal** | **2** |
| **Evaluate the ethics of Skinner’s experiment in terms of the use of animals in research.** | |
| Skinner caused harm/distress (made them hungry/gave them shocks) to the animals | 1 |
| Which is not ethically acceptable | 1 |
| **Subtotal** | **2** |

|  |  |
| --- | --- |
| **Describe two ethical consideration modern researchers would be required to make for any study using animals.** | |
| Any **two** of: | |
| * Reduction (1) the number of animals used must be the minimum necessary (1) to achieve the aims and use good statistical design (1) * Replacement (1) methods to that replace/partially replace use animals must be investigated/considered (1) and where applicable, implemented (1) * Refinement (1) researcher take steps to minimise harm/distress caused to the animals (1) and review these throughout the research (1) | 1-6 |
| **Subtotal** | **6** |
| **Based on your knowledge of the findings of the Skinner Box experiment, propose a directional hypothesis for Dr Miya’s study.** | |
| Footballers | 1 |
| who receive rewards for correct answers | 1 |
| Will achieve higher | 1 |
| Scores on a memory task | 1 |
| Than those who receive no reward | 1 |
| **Subtotal** | **5** |
| **Explain the ‘experimenter effect’ with reference to Dr Miya’s study.** | |
| Experimenter effect is when a researcher’s expectations or behaviours influence the results | 1 |
| Dr Miya wanted her treatment to succeed to gain funding | 1 |
| She gave the footballers with memory loss extra assistance | 1 |
| Which may have influenced their achievement/results in favour of her treatment | 1 |
| **Subtotal** | **4** |
| **Name the cause of memory loss related to trauma.** | |
| Chronic Traumatic Encephalopathy (CTE) | 1 |
| **Subtotal** | **1** |
| **List two emotional effects associated with this condition.** | |
| Any **two** of: | |
| * Anxiety * Paranoia * Depression * Mood swings * Aggression | 1-2 |
| **Subtotal** | **2** |
| **Describe the cause of memory loss associated with Alzheimer’s disease.** | |
| Degeneration of neurons/neural tissue | 1 |
| Loss of synapses over time (Note: Buildup of amyloid tissue and accumulation of tangles do not illustrate degeneration) | 1 |
| **Subtotal** | **2** |

|  |  |
| --- | --- |
| **Use appropriate psychological terminology** | |
| Accurately uses a variety of psychological terminology relevant to theories, studies, models and concepts fluently and in a clear and logical way. | 3 |
| Accurately uses some appropriate psychological terminology relevant to theories, studies, models and concepts in a clear and logical way. | 2 |
| Uses everyday language with limited relevance to theories, studies, models and concepts. | 1 |
| **Subtotal** | **3** |
| **TOTAL** | **33** |
| Accept all relevant answers. | |

**Question 8 (33 marks)**

In your answer you must:

* Describe the role of reinforcers in learning in the context of Elio’s use of social media. (6 marks)
* Define the concept: ‘fixed interval schedule of reinforcement’ (2 marks)
* Explain how a fixed interval schedule could be applied to help Elio learn to spend less time on social media. (2 marks)
* Outline the role of the fine imposed by Elio’s parents to change behaviour. (4 marks)
* Explain how proactive and retroactive interference could explain why Elio is forgetting the information he needs for his Science tests. (4 marks)
* Outline the method of data collection used to research Happiness and Social Media use. (3 marks)
* Describe how a focus group would be applied in this study. (4 marks)
* Explain the concept of ‘demand characteristics’ applied to this study. (3 marks)
* Describe how a ‘single blind procedure’ minimises the impact of demand characteristics. (2 marks)
* Use appropriate psychological terminology. (3 marks)

|  |  |
| --- | --- |
| **Describe the role of reinforcers in learning in the context of Elio’s use of social media.** | |
| Reinforcers strengthen desired behaviours | 1 |
| Positive reinforcement is the introduction of a positive consequence (praise, rewards) | 1 |
| Tran could receive a reward when he doesn’t use social media for more than an hour per day | 1 |
| Negative reinforcement is the removal of something unpleasant/undesired/uncomfortable | 1 |
| Positive and negative reinforcement are applied when the desired behaviour is demonstrated | 1 |
| Elio’s parents remove household chores when he doesn’t use social media for more than one hour a day. | 1 |
| **Subtotal** | **6** |
| **Define the concept: ‘fixed interval schedule of reinforcement’** | |
| A reward/reinforcement is provided at a specified/agreed time | 1 |
| The time intervals are consistent in length /the timing of the reward does not change | 1 |
| **Subtotal** | **2** |
| **Explain how a fixed interval schedule could be applied to help Elio learn to spend less time on social media.** | |
| Elio could be rewarded once a day (accept any identified interval) | 1 |
| When he reduces his social media time to one hour per day | 1 |
| **Subtotal** | **2** |

|  |  |
| --- | --- |
| **Outline the role of the fine imposed by Elio’s parents to change behaviour** | |
| (Positive) punishment | 1 |
| weakens undesired behaviour | 1 |
| By introducing something unpleasant/undesirable | 1 |
| when the undesired behaviour is demonstrated | 1 |
| **Subtotal** | **4** |
| **Explain how proactive and retroactive interference could explain why Elio is forgetting the information he needs for his Science tests.** | |
| Proactive interference occurs when old information/memories disrupt the learning of new information. | 1 |
| Elio might be forgetting because he is recalling information from the previous term that interferes with the new information he is currently learning. | 1 |
| Retroactive interference occurs when the new information/memories are forgotten due to the learning of new information. | 1 |
| Elio might have forgotten the information he learned in the previous term due to the new information he has learned in the current one. | 1 |
| **Subtotal** | **4** |
| **Outline the method of data collection used to research Happiness and Social Media use.** | |
| Mixed methods | 1 |
| Researchers collected qualitative and quantitative data | 1 |
| Focus group (qualitative) and rating scale (quantitative) | 1 |
| **Subtotal** | **3** |
| **Describe how a focus group would be applied in this study.** | |
| Small group of participants (Year 12s) is brought together | 1 |
| Researcher acts as facilitator/moderator to provide focus questions based on Happiness and Social Media Use | 1 |
| Participants are encouraged to speak openly/as if they are in a normal conversation | 1 |
| Facilitator/moderator only intervenes when required/conversation has gone (too far) off topic | 1 |
| **Subtotal** | **4** |
| **Explain the concept of ‘demand characteristics’ in psychological research** | |
| Participants change their behaviour/responses | 1 |
| When they guess/receive cues about what the researchers expect | 1 |
| Year 12 students might provide answers that support previous research/media reports/ related to happiness and social media. (Accept all answers that apply to the topic/aim of the research). | 1 |
| **Subtotal** | **3** |

|  |  |
| --- | --- |
| **Describe how a ‘single blind procedure’ minimises the impact of demand characteristics.** | |
| Only the researcher is aware of which group has received the experimental condition. | 1 |
| The participants are not aware of their allocation and are less likely to change their behaviour. | 1 |
| **Subtotal** | **2** |

|  |  |
| --- | --- |
| **Use appropriate psychological terminology** | |
| Accurately uses a variety of psychological terminology relevant to theories, studies, models and concepts fluently and in a clear and logical way. | 1 |
| Accurately uses some appropriate psychological terminology relevant to theories, studies, models and concepts in a clear and logical way. | 1 |
| Uses everyday language with limited relevance to theories, studies, models and concepts. | 1 |
| **Subtotal** | **3** |
| **TOTAL** | **33** |

**End of Questions**