



STUDENT NUMBER

Letter

PSYCHOLOGY

Written examination

2017

Reading time: 15 minutes

Writing time: 2 hours 30 minutes

QUESTION AND ANSWER BOOK

Structure of book

Section	Number of questions	Number of questions to be answered	Number of marks
A	50	50	50
B	14	14	70
			Total 120

- Students are permitted to bring into the examination room: pens, pencils, highlighters, erasers, sharpeners and rulers.
- Students are NOT permitted to bring into the examination room: blank sheets of paper and/or white out liquid/tape.
- No calculator is allowed in this examination.

Materials supplied

- Question and answer booklet.
- Answer sheet for multiple-choice questions.
- Additional space is available at the end of the booklet if you need extra paper to complete an answer.

Instructions

- Write your **student number** in the space provided above on this page.
- Check that your **name** and **student number** on your answer sheet for multiple-choice questions are correct.
- All written responses must be in English.

At the end of the examination

- Place the answer sheet for multiple-choice questions inside the front cover of this book.

Students are NOT permitted to bring mobile phones and/or any other unauthorised electronic devices into the examination room.

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

Answer **all** questions in pencil on the answer sheet provided for multiple-choice questions.

Choose the response that is **correct** or that **best answers** the question.

A correct answer scores 1; an incorrect answer score 0.

Marks will **not** be deducted for incorrect answers.

No marks will be given if more than one answer is completed for any question.

Question 1

According to the Atkinson-Shiffrin multi-store model of memory, sensory memory

- A. has an unlimited duration.
- B. is not consciously processed.
- C. has a very limited capacity.
- D. is consciously processed before transfer to other memory systems.

Question 2

One evening Edward completed a challenging crossword, then relaxed by doing a 5-minute meditation. Which of the following options best represents the sequence of brain waves that Edward would have experienced, in the order that he would have experienced them?

- A. delta, theta
- B. theta, alpha
- C. alpha, beta
- D. beta, alpha

Question 3

Compared to adults, the daily sleeping habits of a newborn baby will show that the baby will

- A. sleep for longer and have a greater proportion of REM.
- B. sleep less consistently but have a similar proportion of REM sleep.
- C. spend less time sleeping and have a similar proportion of REM sleep.
- D. sleep for longer and have a smaller proportion of REM.

Question 4

A family history of anxiety disorders may be a _____ risk factor for developing a specific phobia of dogs, whereas being repeatedly bitten by dogs may be a _____ risk factor for developing a specific phobia of dogs.

- A. protective; perpetuating
- B. predisposing; perpetuating
- C. precipitating; predisposing
- D. predisposing; precipitating

Question 5

The spinal reflex indicates that

- A. the brain can respond very quickly in situations that require an immediate response to promote survival.
- B. the 'fight-flight-freeze' response can radically enhance our chance of survival.
- C. not all behaviour is initiated by the brain.
- D. not all internal muscles are regulated by the peripheral nervous system.

Use the following information to answer Questions 6-8.

An experiment is conducted by a Principal at a school on the mathematical ability of the VCE students. The Principal selects 100 Year 12 students and 100 Year 11 students from the 400 VCE students at the school as participants for the experiment by drawing their names out of a hat. The Principal then flips a coin to decide whether the participant is allocated to the control or experimental group. After completing this procedure, the control group consists of 25% Year 11 students and 75% Year 12 students while the experimental group consists of 75% Year 11 and 25% Year 12 students. To avoid biasing the results, the Principal had the experiment conducted by an impartial research assistant.

Question 6

The method of sampling used by the Principal was

- A. independent groups.
- B. stratified sampling.
- C. random sampling.
- D. matched participants.

Question 7

The experimental research design used by the Principal was

- A. independent groups.
- B. stratified sampling.
- C. random sampling.
- D. matched participants.

Question 8

One kind of extraneous variable that this experiment is likely to suffer from is _____ which is best controlled for by _____.

- A. individual participant differences; changing the sampling technique
- B. a biased sample; changing the sampling technique
- C. individual participant differences; changing the experimental research design
- D. a biased sample; changing the experimental research design

Question 9

One role of myelin sheath is to

- A. excite an action potential.
- B. inhibit an action potential.
- C. enhance the speed of signal transmission between neurons.
- D. enhance the speed of signal transmission within a neuron.

Use the following information to answer Questions 10-12.

Melissa and Naomi are discussing how worried they are about a forthcoming VCE Units 3 and 4 Biology SAC.

Question 10

According to Lazarus and Folkman's Transactional Model of Stress and Coping, what is the most likely primary appraisal that the two students have made of the forthcoming Biology SAC?

- A. stressful; threat
- B. stressful; harm/loss
- C. irrelevant
- D. benign-positive

Question 11

Melissa decides to spend an extra hour each night studying for the SAC, whereas Naomi finds herself watching TV for longer periods each night leading up to the SAC, and does not adequately prepare for the assessment. In terms of the coping strategies the students have used

- A. Melissa has used an avoidance strategy whereas Naomi has used an approach strategy.
- B. Melissa has used an approach strategy whereas Naomi has used an avoidance strategy.
- C. Melissa has used an avoidance strategy whereas Naomi has used a problem-focused coping strategy.
- D. Melissa has used a primary coping strategy whereas Naomi has used a secondary coping strategy.

Question 12

After a few days, Melissa realises that one extra hour of study a night will not be sufficient for her to learn all that she needs for the forthcoming SAC. She decides to increase the amount of time she studies to an additional two hours per night. In adjusting the amount of time she spends studying, Melissa demonstrates

- A. coping fallibility.
- B. coping rigidity.
- C. coping contextually.
- D. coping flexibility.

Question 13

Doug suffers from persistent feelings of anxiety that often makes it harder to complete his day-to-day activities. While he has thought about seeking professional help for his anxious behaviour, he has never sought it out and continues to live with chronic feelings of anxiety. According to the transtheoretical model, Doug is currently at the

- A. action stage.
- B. preparation stage.
- C. contemplation stage.
- D. pre-contemplation stage.

Question 14

Amber and Erina are trying to remember the names of their old classmates from Grade 1. Amber attempts to write down a list of all the names of the students in the class off the top of her head, whereas Erina attempts to identify her classmates' names from a list of all the students at primary school that year. With all other factors being equal, who will demonstrate a better memory of the names and why?

- A. Erina will demonstrate a better memory of the names as she utilises a more sensitive method of memory retrieval than Amber
- B. Amber will demonstrate a better memory of the names as she utilises a more sensitive method of memory retrieval than Erina
- C. Both Amber and Erina should demonstrate the same memory of their classmates' names as the information has processed by their amygdalae and hippocampi
- D. Both Amber and Erina should demonstrate the same memory of their classmates' names as declarative memory is less vulnerable to decay

Question 15

One significant ethical issue associated with the 'Little Albert' experiment was that

- A. it is unethical to use babies in experimental research.
- B. Little Albert never underwent a formal procedure to extinguish the conditioned response.
- C. Little Albert was an unfit to participate as Watson noted that prior to the conditioning phase he was easily scared.
- D. Watson was not able to formally report his findings in a Psychological journal.

Use the following information to answer Questions 16-17.

Aki's doctor suggests that Aki should take up jogging regularly as a means of reducing his stress.

Question 16

One way that jogging regularly can help reduce Aki's feeling of stress is that

- A. jogging activates Aki's freeze response.
- B. jogging allows Aki the opportunity to ruminate on the stressor.
- C. jogging activates Aki's cerebellum.
- D. jogging can help use up the stress-hormones that were already present in Aki's body.

Question 17

Aki notices that he becomes less stressed the more he jogs. This encourages Aki to jog more regularly. In terms of operant conditioning, what type of consequence is Aki experiencing from jogging?

- A. positive reinforcement
- B. negative reinforcement
- C. response cost
- D. punishment

Question 18

Without a control group, psychological research can never

- A. establish a valid cause and effect relationship between variables.
- B. establish a reliable trend in data.
- C. be useful.
- D. be representative of a population of research interest.

Use the following information to answer Questions 19-20.

Dr Murga learned of a unique patient named David who has had his hippocampi severely damaged by a stroke one month ago. She performed a series of tests on him to determine the effect on his memory.

Question 19

Which of the following options is the most likely effect of this brain damage on David's memory?

- A. David can acquire new skills and learn new information but struggles to recall the information he learnt prior to the brain damage
- B. David has lost his ability to demonstrate procedural memory, but his declarative memory remains largely intact
- C. David can recall events from early in his life in vivid detail but struggles to recall any details of information he has learned since the brain damage
- D. Although David cannot recall the half hour prior to the stroke, he suffers no additional memory loss

Question 20

Dr Murga finds David to be a fascinating patient, but is aware that she cannot make any generalisations from his responses about the role of the hippocampus for normal, healthy people. This is because a case study

- A. cannot produce reliable results from an individual.
- B. cannot be a valid representation of the population.
- C. cannot yield valid data for the individual.
- D. is useless from a research perspective.

Question 21

Tiffany has just received her L-plates and has her first driving lesson. She is surprised to realise that without being specifically instructed, she already has an understanding of the way in which the accelerator and brake pedals work. In terms of observational learning, this may be because

- A. she has been reinforced for correctly identifying the function of the accelerator and brake pedals.
- B. she is able to display stimulus generalisation between the roles of the accelerator and brake pedals.
- C. she knows that depressing the accelerator will always yield reinforcement and depressing the break will always yield punishment.
- D. she has attended to her parents as they drive and retained this information, but not yet had the opportunity to attempt to reproduce the behaviour.

Question 22

A researcher analyses the data gathered from the control group of an experiment and finds that the results indicate some outliers who show a far lower response than most of the cohort. One implication of this result is that

- A. a mean may not be the most accurate measure of central tendency to use for this data set.
- B. the standard deviation is likely to be narrow.
- C. the results cannot be valid.
- D. the graph is bimodal.

Question 23

Consciousness is a psychological concept that varies along a continuum. This means that

- A. changes in consciousness cannot be perceived by the individual who is experiencing them.
- B. different states of consciousness are associated with qualitatively different levels of awareness.
- C. consciousness can be directly observed and measured by researchers.
- D. humans share a universal experience of consciousness.

Question 24

Which neurotransmitter is most important for long-term potentiation?

- A. serotonin
- B. GABA
- C. glutamate
- D. adrenaline

Question 25

Which of the following statements best describes the relationship between controlled and automatic processes and types of attention?

- A. controlled and automatic processes can both be completed using divided attention
- B. controlled processes require divided attention whereas automatic processes require focused attention
- C. controlled processes require focused attention whereas automatic processes allow divided attention
- D. controlled processes and automatic processes both require focused attention

Question 26

A Psychology professor requires research participants for an experiment he is conducting and decides to ask his students to be involved. After comprehensively explaining the aims and nature of the experiment to his students, he invites them to participate in the research and tells them that they will receive an additional 10% of their overall score if they participate, and that they will lose 5% of their overall score if they choose not to participate. The students who choose to participate then sign a document indicating their willingness to be a part of the experiment. In this scenario, which ethical principle has the professor violated?

- A. withdrawal rights
- B. voluntary participation
- C. debriefing
- D. informed consent

Question 27

The night before a Chemistry test, Lawrence stays up late to prepare and only gets three hours of sleep. His classmate Eli has nine hours of sleep but suffers from multiple sleep walking episodes each night. In terms of the experiences of the two students

- A. Lawrence will have experienced total sleep deprivation while Eli will have experienced partial sleep deprivation.
- B. Lawrence is likely to experience negative effects of sleep deprivation the following day but Eli is not likely to experience any effects of sleep deprivation.
- C. Lawrence will be unaffected by the effects of sleep deprivation, while Eli is likely to experience some behavioural changes because of his condition.
- D. both Lawrence and Eli could possibly experience some difficulties with attention the following day.

Use the following information to answer Questions 28-32.

At Julia's 10th birthday party she was happy to see that her mother had filled the living room with balloons. However, after the party her naughty sister repeatedly held balloons in front of Julia's face and then popped them with a pin. The loud noise frightened Julia and ever since this experience, she has complained of a severe fear of balloons. When Julia is 12, her parents decide to take her to see a psychologist to help treat her fear of balloons.

Question 28

In terms of classical conditioning, how could Julia's fear of balloons be best described in the 'after conditioning' phase?

- A. the unconditioned response
- B. the unconditioned stimulus
- C. the conditioned response
- D. the conditioned stimulus

Question 29

Which of the following best describes the role that Julia's amygdala played in the formation of her fear of balloons?

- A. Julia's amygdala was involved in the consolidation of the implicit emotional content of the memory of her sister repeatedly popping balloons in front of her
- B. Julia's amygdala was active in generating a feeling of reward when she had balloons popped in front of her
- C. Julia's amygdala stored the procedural memory of how she should react to a balloon
- D. Julia's amygdala was entirely responsible for the consolidation of the explicit episodic memory of her sister popping balloons in front of her

Question 30

Which of the following best describes the role that Julia's hippocampus played in the formation of her fear of balloons?

- A. Julia's hippocampus was involved in the consolidation of the implicit emotional content of the memory of her sister repeatedly popping balloons in front of her
- B. Julia's hippocampus was active in generating a feeling of reward when she had balloons popped in front of her
- C. Julia's hippocampus stored the procedural memory of how she should react to a balloon
- D. Julia's hippocampus was involved in the consolidation of the explicit episodic memory of her sister popping balloons in front of her

Question 31

The psychologist also notes that Julia will avoid any situation that may involve balloons. In terms of operant conditioning, avoiding balloons

- A. precipitates her fear of balloons through positive reinforcement.
- B. perpetuates her fear of balloons through negative reinforcement.
- C. extinguishes her fear of balloons through lack of exposure to the conditioned stimulus.
- D. extinguishes her fear of balloons through lack of exposure to the unconditioned stimulus.

Question 32

The psychologist suggests that Julia use systematic desensitisation to help reduce her fear of balloons. During the procedure, the psychologist repeatedly pairs the sight of balloons with a relaxation technique. In terms of the language of classical conditioning, what is the relaxation technique?

- A. the neutral stimulus
- B. the conditioned stimulus
- C. the unconditioned stimulus
- D. the conditioned response

Question 33

Research that reports that runners sleep for longer periods of time on the nights after running an ultramarathon supports

- A. the restoration theory of sleep.
- B. the circadian theory of sleep.
- C. the evolutionary theory of sleep.
- D. the ultradian theory of sleep.

Use the following information to answer Question 34-35.

Sylvia and Lucy are both police officers who are listening to a briefing from their superior that lists 20 locations of suspected crimes in the local area. Sylvia has a pen in her pocket and writes down as many locations as she can remember immediately after hearing the complete list of locations, whereas Lucy is less prepared and must wait until the end of the briefing to return to her desk, find a pen and write down as many locations as she can remember.

Question 34

Given the serial position effect, it is likely that

- A. Lucy's recollection of the list of locations demonstrated a primacy and recency effect whereas Sylvia's recollection of the list only demonstrated a primacy effect.
- B. Lucy's recollection of the list of locations demonstrated a primacy and recency effect whereas Sylvia's recollection of the list only demonstrated a recency effect.
- C. Sylvia's recollection of the list of locations demonstrated a primacy and recency effect whereas Lucy's recollection of the list only demonstrated a primacy effect.
- D. Sylvia's recollection of the list of locations demonstrated a primacy and recency effect whereas Lucy's recollection of the list only demonstrated a recency effect.

Question 35

One reason that Sylvia demonstrates superior recall of the names of the locations compared to Lucy may be that

- A. she has reconstructed the information.
- B. procedural memory is influenced by the serial position effect.
- C. semantic memory is not influenced by the serial position effect.
- D. that long-term memory and short-term memory have different durations and capacities.

Use the following information to answer Questions 36-39.

Dr Clarke is conducting an experiment on the effect of taking a stimulant medication on attention.

Question 36

Dr Clarke determines the precise dosage of the stimulant medication he will give the participants in his experimental group and ensures that it is taken 15 minutes after eating a meal three times a day for a period of two days. By doing this, Dr Clarke is

- A. operationalising the independent variable of the experiment.
- B. operationalising the dependent variable of the experiment.
- C. using a matched participants experimental research design.
- D. using a repeated measures experimental research design.

Question 37

Dr Clarke also ensures that his control group receives a substance that looks identical to the stimulant medication but does not include any active ingredients. The substance that Dr Clarke gives to the control group is known as a

- A. single blind.
- B. placebo effect.
- C. placebo.
- D. double blind.

Question 38

To help Dr Clarke determine the effect of the stimulant medication on attention, he will interview all participants about their experiences of taking the drug, allowing the participants to describe how they felt in their own words. The type of data he is collecting is both

- A. primary and quantitative.
- B. secondary and quantitative.
- C. primary and qualitative.
- D. secondary and qualitative.

Question 39

If Dr Clarke were to also measure the participants with an EEG machine it would be expected that the experimental group would demonstrate

- A. more alpha waves after ingesting the stimulant medication than the control group.
- B. less beta waves after ingesting the stimulant medication than the control group.
- C. less alpha waves after ingesting the stimulant medication than the control group.
- D. more beta waves after ingesting the stimulant medication than the control group.

Question 40

Dreams occur

- A. only in a hypnagogic state
- B. only in NREM sleep
- C. only in REM sleep
- D. in both REM and NREM sleep

Question 41

An EMG would detect the lowest level of electrical activity at what stage of sleep?

- A. NREM stage 1
- B. NREM stage 2
- C. NREM stage 3
- D. REM

Use the following information to answer Questions 42-43.

Colin has been unemployed for six months. He frequently dwells on his unemployment, going over the reasons he was fired again and again in his head. Although he knows he is generally a good and hard-working person, he feels that he does not have the ability to successfully get a job in the future. He notices that he is finding it increasingly difficult to relax without drinking alcohol, which he is consuming regularly and excessively. Problems with alcohol have recently led his partner to request a separation from their relationship.

Question 42

Colin's thought processes display

- A. poor self-esteem.
- B. poor self-efficacy.
- C. impairment of memory.
- D. coping flexibility.

Question 43

Colin's experience makes him vulnerable to developing a mental illness because of

- A. cumulative risk.
- B. decreasing risk.
- C. coping flexibility.
- D. social support.

Question 44

An experiment must

- A. support the hypothesis.
- B. establish a relationship between variables.
- C. have a control condition and an experimental condition.
- D. have an even number of participants in the control and experimental group.

Question 45

The mean is a more accurate measure of central tendency when

- A. the standard deviation of the data set is low.
- B. the standard deviation of the data set is high.
- C. primary data is used.
- D. secondary data is used.

Question 46

A resilient individual

- A. experiences few setbacks in life.
- B. is always happy.
- C. is able to adapt effectively to life stressors.
- D. is more vulnerable to developing a mental illness.

Use the following information to answer Questions 47-48.

Amanda is learning a new song on the piano. She notices that she gets better the more she practices and makes fewer mistakes.

Question 47

In terms of synaptic plasticity, long-term depression is

- A. helping Amanda to increase the strength of the synapses that are active when she plays the song.
- B. helping Amanda to decrease the strength of synapses that were initially inappropriately activated and led to mistakes.
- C. hindering Amanda's progress in learning the song.
- D. lowering Amanda's mood.

Question 48

In terms of synaptic plasticity, long-term potentiation is

- A. allowing the action potential within the post-synaptic neuron to 'fire' more quickly
- B. allowing the action potential within the pre-synaptic neuron to 'fire' more quickly.
- C. allowing the pre-synaptic neuron to stimulate the post-synaptic neuron more frequently.
- D. allowing the post-synaptic neuron to stimulate the pre-synaptic neuron more frequently.

Use the following information to answer Questions 49-50.

Bruce was waiting for a tram on a busy street when he witnessed a road accident involving a car and truck. A police officer quickly arrived at the scene of the crime and asked Bruce, 'How fast were the vehicles travelling before they slammed on their breaks and smashed into each other?'

Question 49

Bruce's response to this question is likely to be

- A. a very accurate reflection of the events he witnessed.
- B. more accurate if he were asked one month later.
- C. more accurate if he were asked one day later.
- D. biased by the presuppositions present in the question asked by the police officer.

Question 50

Two months later, a police officer is conducting a follow up investigation into the accident and asks Bruce to return to the location he was standing when he originally saw the accident take place. He is then asked some further questions about the events. By returning to the scene of the crime, the police officer is attempting to make use of

- A. maintenance rehearsal.
- B. elaborative rehearsal.
- C. state dependent cues.
- D. context dependent cues.

SECTION B**Instructions for Section B**

Answer **all** questions in the spaces provided. Write using black or blue pen.

Question 1 (4 marks)

Describe how the lock-and-key process works to create excitatory effects on the nervous system. In your response, refer to a relevant neurotransmitter.

Question 2 (3 marks)

Shams learnt to ride a bike at age 8 but has not ridden one for 10 years. On his 18th birthday he receives the gift of a new bike and is surprised to discover that he still knows how to ride.

- a.** What type of long-term memory is Shams drawing on when he rides a bike again as an adult? 1 mark

- b.** Describe the role of Shams' cerebellum in his memory of how to ride a bike. 2 marks

Question 3 (2 marks)

What are two differences between stress and phobia?

Question 4 (7 marks)

Katherine got a promotion at work that was very demanding. Her response to this stressor was typical of that seen in the General Adaptation Syndrome and after two months in the new role she had developed a persistent cold and a lingering feeling of fatigue.

- a. Describe how you would expect Katherine's resistance to stress to change during the alarm reaction stage and why you would expect the change to occur. 3 marks

- b. What symptoms does Katherine experience that indicate that she has entered the third stage of the General Adaptation Syndrome? Describe the reason she may have entered this third stage, with reference to stress hormones. 4 marks

Question 5 (8 marks)

Ronald and his younger sister Suzie eat dinner with their parents regularly. One night after dinner, Ronald offers to clean the dishes for his parents. The following day his parents serve him an extra helping of dessert to say thank you. Following this meal, he again offers to do the dishes and he continues to do so as long as his parents reward him with extra helpings of dessert.

- a. With reference to the scenario, explain three reasons why Ronald's dishwashing behaviour has been learnt through operant conditioning. 6 marks

- b. One evening when Ronald is away at a school camp, Suzie offers to do the dishes after dinner in the hope of receiving an extra helping of dessert the following night. 2 marks
What sort of learning has Suzie displayed? Justify your answer with reference to the scenario.

Question 6 (2 marks)

Priya decides to join her friends in a game of soccer. Describe the role of both the central and somatic nervous system required for Priya to kick the soccer ball during the game.

Question 7 (3 marks)

As a child, Max showed ambivalence and apprehension towards his parents. When frightened, he did not always return to his parents for comfort and on the relatively rare occasion that he sought close contact with his parents, he would avoid making eye contact with them.

- a. What risk factor for developing a mental disorder does Max display? 1 mark

- b. Will Max's early life experiences mean that he will develop a mental disorder as an adult? 2 marks
Justify your response.

Question 8 (3 marks)

Name two common motor symptoms and one common cognitive symptom associated with Parkinson's disease.

Motor symptoms:

Cognitive symptom:

Question 9 (6 marks)

A researcher is interested in conducting a repeated measures experiment into the effects of alcohol compared to sleep deprivation on concentration.

- a.** What is the independent variable of this experiment, and how could it be operationalised? 2 marks

- b.** How would the researcher achieve a repeated measures design and what possible extraneous variable might using this design introduce? 2 marks

- c.** What is a potential advantage of using the repeated measures experimental design? 1 mark

- d.** Based on prior research in this area, how would you expect a blood alcohol concentration (BAC) of 0.10% to affect performance on a hand-eye coordination task compared to 24 hours of sleep deprivation? 1 mark

Question 10 (4 marks)

Using examples, explain how dyssomnias differ from parasomnias.

Question 11 (2 marks)

How can sleep-onset insomnia lead to the development of other sleep phase disorders?

Question 12 (2 marks)

What is the relationship between poor sleep and mental health?

Question 13 (14 marks)

Dr Gibson is investigating whether it is beneficial to add pharmacological treatment to cognitive-behavioural therapy (CBT) when treating specific phobia. She places an advertisement for the participants in a local newspaper that asks for volunteers who meet the diagnostic criteria for specific phobia and gathers 40 eligible participants.

Dr Gibson ensures participants are fully informed of the nature of the research including any potential risks associated with participation and the rights of the participants. Once the participants signed a written consent form, she then divides the participants into two groups by flipping a coin.

Group A receives a treatment involving weekly one hour long CBT sessions and medication; tablets containing 0.25mg of the benzodiazepine Xanax to be taken three times a day.

Group B receives a treatment involving weekly one hour long CBT sessions and placebo pills to be taken three times a day.

The participants are unaware as to which group they have been allocated to.

The participants are given self-report tests to rate their experience of phobic symptoms out of 10 (1 being no experience of symptoms and 10 being an extreme experience of symptoms) at set time intervals of day 1, after 1 month, after 3 months, after 6 months, and after 12 months.

The results of the research investigation are summarised in figure 1.

	Day 1	After 1 month	After 3 months	After 6 months	After 12 months
Group A (CBT + Medication)	7.45	4.5	3.55	3.25	3.15
Group B (CBT + Placebo)	7.9	5.95	5.05	3.95	3.35

Figure 1. Mean self-report specific phobia symptoms out of 10.

- a. Identify and operationalise the dependent variable of Dr Gibson's experiment.

2 marks

b. What was the hypothesis of Dr Gibson's experiment?

2 marks

c. Dr Gibson submitted her research proposal before an ethics committee prior to conducting the experiment, who deemed the use of the placebo treatment permissible for this experiment. Provide two reasons why it is ethically permissible to use a placebo treatment in this experiment.

2 marks

8 marks

- The results of the research
- Possible limitations of the research
- The extent to which the results can be generalised

[illegible]

Fred is a doctor at an emergency ward in an urban hospital. He is currently seeing a patient named Simon, who is a cyclist that has just been hit by a passing car. Fred is concerned that Simon is suffering a concussion and has entered into an altered state of consciousness. Drawing on your understanding of the psychological and physiological differences between normal waking consciousness and altered states of consciousness, suggest how Fred could test to see if the cyclist is in an altered state of consciousness.

[illegible]

END OF QUESTION AND ANSWER BOOK

Clearly number all responses in this space.

[illegible]

STUDENT
NAME:

Use a **PENCIL** for **ALL** entries. For each question, shade the box which indicates your answer.

Marks will **NOT** be deducted for incorrect answers.

NO MARK will be given if more than one answer is completed for any question.

If you make a mistake, **ERASE** the incorrect answer – **DO NOT** cross it out.

1	A	B	C	D	18	A	B	C	D	35	A	B	C	D
2	A	B	C	D	19	A	B	C	D	36	A	B	C	D
3	A	B	C	D	20	A	B	C	D	37	A	B	C	D
4	A	B	C	D	21	A	B	C	D	38	A	B	C	D
5	A	B	C	D	22	A	B	C	D	39	A	B	C	D
6	A	B	C	D	23	A	B	C	D	40	A	B	C	D
7	A	B	C	D	24	A	B	C	D	41	A	B	C	D
8	A	B	C	D	25	A	B	C	D	42	A	B	C	D
9	A	B	C	D	26	A	B	C	D	43	A	B	C	D
10	A	B	C	D	27	A	B	C	D	44	A	B	C	D
11	A	B	C	D	28	A	B	C	D	45	A	B	C	D
12	A	B	C	D	29	A	B	C	D	46	A	B	C	D
13	A	B	C	D	30	A	B	C	D	47	A	B	C	D
14	A	B	C	D	31	A	B	C	D	48	A	B	C	D
15	A	B	C	D	32	A	B	C	D	49	A	B	C	D
16	A	B	C	D	33	A	B	C	D	50	A	B	C	D
17	A	B	C	D	34	A	B	C	D					