**Insert School Logo**

**PSYCHOLOGY**

**ATAR YEAR 11**

**UNIT 1 2021**

**Question/Answer Booklet**

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Teacher: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Time allowed for this paper

Reading/planning time before commencing work: ten minutes

Working time for paper: three hours

Material required/recommended for this paper

To be provided by the supervisor

This Question/Answer Booklet

To be provided by the candidate

Standard materials:pens (blue/black preferred), pencils (including coloured), sharpener, eraser, correction fluid/tape, ruler, and highlighters

Special items: non-programmable calculators approved for use in the WACE examinations

Important note to candidates

No other materials may be taken into the examination room. It is your responsibility to ensure that you do not have any unauthorised notes or other items of a non-personal nature in the examination room. If you have any unauthorised material with you, hand it to the supervisor before reading any further.

Structure of this paper

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Section | Number of questions available | Number of questions to be attempted | Suggested working time  (minutes) | Marks | Percentage of exam |
| Section One:  Research methods | 3 | 3 | 30 | 30 | 20 |
| Section Two:  Short answer | 6 | 6 | 80 | 83 | 55 |
| Section Three:  Extended answer | 2 | 2 | 40 | 37 | 25 |
|  |  |  | Total | 150 | 100 |

# Instructions to candidates

1. The rules for the conduct of Western Australian external examinations are detailed in the *Year 11 Information Handbook 2021.* Sitting this examination implies that you agree to abide by these rules.
2. Write your answers in this Question/Answer Booklet.
3. You must be careful to confine your responses to the specific questions asked and to follow any instructions that are specific to a particular question.

1. Spare pages are included at the end of this booklet. They can be used for planning your responses and/or as additional space if required to continue an answer.

* Planning: If you use the spare pages for planning, indicate this clearly at the top of the page.
* Continuing an answer: If you need to use the space to continue an answer, indicate in the original answer space where the answer is continued, i.e. give the page number. Fill in the number of the question that you are continuing to answer at the top of the page.

Section One: Research Methods 20% (30 marks)

This section has three questions. Answer all questions. Write your answers in the spaces provided.

Supplementary pages for planning/continuing your answers to questions are provided at the end of this Question/Answer booklet. If you use these pages to continue an answer, indicate at the original answer where the answer is continued, i.e. give the page number.

Suggested working time: 30 minutes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Question 1 (9 marks)

Forty participants were tasked with learning a list of 20 words while listening to music. An hour later, the participants were randomly allocated into two equal size groups and their recall ability was assessed when they were asked to recall the list of words. Group one completed their recall while listening to the same music played at the beginning of the study, while Group two recalled the words in silence. The table below shows the results collected.

|  |  |  |
| --- | --- | --- |
|  | **Group one** | **Group two** |
| Mean | 16 | 10 |
| Range | 8 | 12 |

(a) Comment on the spread of scores for each of the two groups. (1 mark)

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(b) Create a suitable operationalised hypothesis for this study. (4 marks)

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Question 1 (continued)

(d) This experiment was an independent measures design. This means that there were two groups, one for each condition of the independent variable. Explain two advantages to this study design, compared to repeated measures design.

(4 marks)

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Question 2 (13 marks)

A personal trainer wanted to investigate whether the tempo of music listened to while walking affected the speed at which people walk. She predicted that the faster the tempo of music listened to, the faster the person would walk. The personal trainer used beats per minute (bpm) as a measure of music tempo and recorded the distance (km) that 20 seventeen-year-old students walked for one hour on a treadmill. Five students were allocated into four different conditions, their results shown in the table below.

|  |  |
| --- | --- |
| Condition | Average distance walked (km) |
| Condition one: walking without listening to music | 3 |
| Condition two: walking listening to music at 40-70 bpm | 2.5 |
| Condition three: walking listening to music at 85-110 bpm | 4 |
| Condition four: walking listening to music at 120-140 bpm | 5.5 |

(a) Graph the results from the above information into the grid below. (5 marks)

A spare grid is provided at the end of this Question/Answer booklet.

If you need to use it, cross out this attempt.



Question 2 (continued)

(b) Summarise the results of this study. (3 marks)

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Outline one way that the reliability of the experiment could be increased.

(1 mark)

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(d) Identify two ethical considerations related to this experiment and explain why the personal trainer should take them into consideration. (4 marks)

One: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Two: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Question 3 (8 marks)

Miss Kicisnski had her small group of students sit a 20-mark test after no revision and then another test after allowing them two hours of revision. Their test results are shown in the table below.

|  |  |  |
| --- | --- | --- |
| Participant | Score on test without revision | Score on test after 2 hours of revision |
| 1 | 11 | 15 |
| 2 | 6 | 17 |
| 3 | 8 | 20 |
| 4 | 10 | 14 |
| 5 | 7 | 12 |

(a) i. Calculate the mean score for participants who did no revision before their test,

giving the answer correct to one decimal place. (1 mark)

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ii. Calculate the median score for participants who did 2 hours of revision before

their test. (1 mark)

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(b) State whether Miss Kicinski’s research is experimental or non-experimental and provide one reason for your response. (2 marks)

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Question 3 (continued)

(c) The data collected for the research was quantitative. Evaluate the usefulness of collecting quantitative data compared to qualitative. (4 marks)

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**End of Section One**

**Section Two: Short Answer 55% (87 marks)**

This section has six questions. Answer all questions. Write your answers in the spaces provided.

Supplementary pages for planning/continuing your answers to questions are provided at the end of this Question/Answer booklet. If you use these pages to continue an answer, indicate at the original answer where the answer is continued, i.e. give the page number.

Suggested working time: 90 minutes

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Question 4 (17 marks)

In the Netflix drama, The Queen’s Gambit, the main character is Beth, a chess prodigy who strives to become the greatest chess player in the world. The game of chess requires skills that are dominantly controlled by the left or right cerebral hemispheres in the brain.

(a) For the following examples, identify whether the left or right hemisphere is more

dominant.

i. Recognising that the chess board has a pattern of dark and light squares.

(1 mark)

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ii. The abstract reasoning required when working out which piece to move (if I

move my rook here, then I can take out his bishop). (1 mark)

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(b) Describe the structure and function of the corpus callosum. (2 marks)

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(d) i. Using the diagram below, identify the part of Phineas Gage’s brain that

sustained most of the damage during his accident (shade in or draw a line

around the part). (1 mark)



ii. Explain why Phineas Gage survived the incident, referring to the function of

different parts of the brain. (3 marks)

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(e) Describe the path messages take when travelling through a sending (presynaptic) neuron to a receiving (post synaptic) neuron. (4 marks)

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Question 4 (continued)

(f) i. Fast-growing tissues in the brain, such as cancerous tumours, consume a lot

of energy. Explain how these tumours are detected by the positron emission

tomography scan (PET). (2 marks)

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ii. Compare and contrast an MRI scan and fMRI scan. (3 marks)

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Question 5 (12 marks)

(a) Explain one way in which exercise can affect emotion through the production of

neurotransmitters. (2 marks)

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Question 5 (continued)

(b) i. Outline the effect of a hallucinogen on perception. (1 mark)

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ii. Name one hallucinogen drug that may cause the effect described in part (i).

(1 mark)

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(c) Complete the table below. (8 marks)

|  |  |  |
| --- | --- | --- |
|  | **Amphetamine** | **Alcohol** |
| **Class of drug** |  |  |
| **Effect on central nervous system** |  |  |
| **Effect on breathing rate** |  |  |
| **Effect on confidence levels** |  |  |

Question 6 (16 marks)

When viewing stimuli, part of the image projected onto the retina of the eye is obstructed by the spot at which the optical nerve joins the retina. This spot is known as the ‘blind spot’.

(a) Name the process that allows the brain to fill the gap formed by the blind spot and

form a whole coherent image. (1 mark)

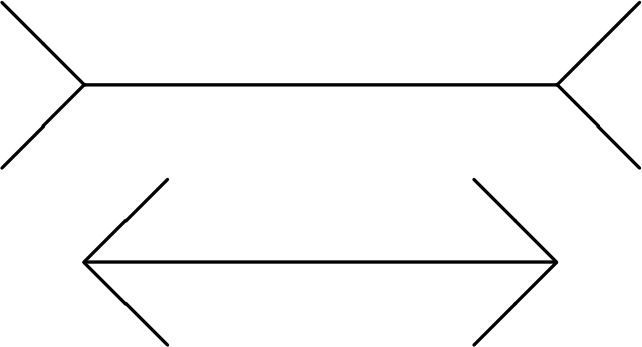
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(b) Outline one reason why psychologists study illusions. (1 mark)

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(c) The image below is known as the Müller-Lyer illusion. Referring to the relevant theorists, outline one theory that explains this illusion. (3 marks)



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Question 6 (continued)

(d) i. List the two main categories of consciousness. (2 marks)

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ii. State one example of an altered state of consciousness that occurs naturally.

(2 marks)

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(e) A nurse is wanting to check whether a patient has been anaesthetised and is

ready for surgery. Identify and explain how **one** physiological measure could be used to determine the state of consciousness of the patient. (2 marks)

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(g) Lucas works from home and living under a flight path, has become accustomed to the sound of airplanes flying low overhead to the point that he no longer notices the noise. The airport changed flight paths due to tarmac maintenance and for a few days no planes flew over Lucas’ house. Once the maintenance was completed and the planes started flying over Lucas’ house again, Lucas noticed the noise and it even frustrated him for the first few hours.

With reference to the above scenario, explain the two processes that are occurring. (6 marks)

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Question 7 (14 marks)

(a) Define the term ‘effective communication’. (1 mark)

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(b) A psychologist is providing therapy to a new client, Chris, who was encouraged by his girlfriend to attend, but who is not particularly open to the experience.

i. As the psychologist asks Chris questions, he is not replying to her in detail,

however, he is making gestures as he speaks. Explain how Chris’ gestures

can help the psychologist provide him with beneficial therapy.

(2 marks)

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ii. There are many examples of gestures that humans use when communicating,

whether or not they are aware they are making them. List **three** examples of

gestures. (3 marks)

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Question 7 (continued)

(c) Mary, a deaf four-year-old, is learning how to communicate using Auslan. Her

parents, siblings and close family friends are also learning the language. Explain

why it is important that Mary’s social network learns sign language.

(2 marks)

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(d) Outline **three** ways that the delay in her language skills would affect her

development in primary school. (3 marks)

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(e) Robinson published a book in 2003 which drew attention to the different ways

adults communicate socially.

i. Name the verbal social skill addressed by Robinson. (1 mark)

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ii. According to Robinson, how a person conducts a handshake can

communicate a message. Identify one feature of a handshake and describe its

associated meaning. (2 marks)

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**Question 8 (15 marks)**

(a) Explain why it is difficult to define ‘intelligence’. (2 marks)

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(b) The multiple intelligences theory claims that there are numerous intelligences that

each person possesses.

i. Name the theorist who developed this theory. (1 mark)

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ii. Aaron is a twelve-year-old boy who aspires for a career in teaching. Using the

Multiple intelligence theory, identify one type of intelligence important to

succeed in this role, justifying your answer.

(2 marks)

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iii. Describe how multiple intelligences can be used by primary school teachers in

the classroom. (1 mark)

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Question 8 (continued)

(c) Spearman developed the two-factor theory of General Intelligence.

ii. Identify what the ‘S factor’ refers to in Spearman’s theory. (1 mark)

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iii. Spearman administered a range of tests on children and found scores on

tests, such as maths and logical reasoning, had strong positive correlations

with each other. Explain what this means, with reference to the role of the S

factor G factor.

(4 marks)

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Question 8 (continued)

(e) Individual intelligence testing requires the examiner to build rapport with the test

taker. Outline how this may be a benefit of individual intelligence testing as well as

be seen as a limitation. (2 marks)

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Disadvantage: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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(f) Explain why scores are generally dependent on reading ability in group intelligence

tests, while in individual intelligence tests, scores are not generally dependent on

reading ability. (2 marks)

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**Question 9 (9 marks)**

(a) Popular Australian research on the formation of adolescent groups suggests that

peer groups change over time and move through a number of distinct stages.

i. Identify the number of stages theorised in the research. (1 mark)

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ii. At which stage does group membership require a degree of conformity among

members? (1 mark)

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Question 9 (continued)

(b) Explain why bullying is a form of anti-social behaviour. (2 marks)

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(c) Outline two characteristics of pro-social behaviour. (2 marks)

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(d) Vincent is a 3-months-old and cries when he requires his needs to be met.

Explain why his survival is partially dependent on his primary caregiver having

the ability to feel empathy. (3 marks)

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**End of Section Two**

Section Three: Extended Answer 25% (52 marks)

Section three consists of two questions. You must answer both questions.

Supplementary pages for planning/continuing your answers to questions are provided at the end of this Question/Answer booklet. If you use these pages to continue an answer, indicate at the original answer where the answer is continued, i.e. give the page number.

Suggested working time: 60 minutes.

Write your answer to Question 10 on pages 27-32. When you have answered this question, turn to page 33 for Question 11 and write your answer on pages 34-39.

**Question 10 (14 marks)**

Year 12 students, Christine and Adelle, met at the Pulse Perspectives exhibition of year 12 art work at the Art Gallery of WA. They started chatting after Adelle complimented Christine on the dress she was wearing and after a few hours discussing the exhibited art together, they exchanged numbers and agreed to meet for coffee the following week. As Christine had her licence and Adelle only lived 10 minutes away, she gave Christine a lift to the café and in return, Adelle paid for Christine’s coffee and cake at the café. Over time, they became close friends.

In your answer you should:

 Define the term ‘liking’.

 Name and outline the **three** determinants of liking.

 Provide an example of how each determinant of liking can be seen between Christine

and Adelle.

 Comment on the type of behaviour demonstrated by both Christine and Adelle.

**Question number: \_\_\_\_\_\_\_\_\_\_\_**

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**Question 11 (23 marks)**

In the 1960s, Paul Ekman visited people from different cultures and took photographs of their expressions given when presented with scenarios. He then asked participants from around the world to identify the emotions shown in the photographs and discovered that more than 90% of expressions were recognised around the world. Ekman theorised six common facial expressions that are recognised universally.

The ability to recognise facial expressions allows for the emotions of people around us to be identified. Emotional intelligence (EQ) became popularised in the late 1990s and many believe it is as important as IQ for social, academic and professional success.

In your answer you should:

* Describe the type of communication facial expressions are categorised under.
* List **four** common facial expressions that are universally recognised.
* Outline the **three** main concepts that make up EQ.
* Suggest **two** reasons why many people believe EQ is a valuable skill that leads to success in the workplace.
* Define the term ‘active listening’ and, considering an individual with high EQ, provide **two** examples to show how they could actively listen to another person.
* Refer to psychological evidence and understandings.

**End of questions**

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Additional working space

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Question 2(a)

