



Joseph Banks Secondary College

**Research Methods, Cognition and
Communication**
Worth 5% of the school mark
Question/Answer Booklet

PSYCHOLOGY

Units 1 and 2

Student name : _____

Time allowed for this paper

Reading time before commencing work: **two minutes**

Working time for the paper: **sixty-two minutes**

Materials required/recommended for this paper

To be provided by the supervisor:

This Question/Answer Booklet

Formulae and Data Booklet

To be provided by the candidate:

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

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

Important note to candidates

No other items 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	Suggested working time (minutes)	Your Mark	Marks available	Percentage of test
Section One: Research Methods	3	20		21	25
Section Two: Short Answer	3	41		41	75
Total				62	100

Instructions to candidates

1. The rules for the conduct of Western Australian external examinations are detailed in the *Year 11 Information Handbook 2016*. Sitting this examination implies that you agree to abide by these rules.
2. Write your answers in this Question/Answer Booklet.
3. When calculating numerical answers, show your working or reasoning clearly. Your working should be in sufficient detail to allow your answers to be checked readily and for marks to be awarded for reasoning.

In calculations, give final answers to one significant figures and include appropriate units where applicable.

4. 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.
5. Supplementary pages for the use of planning/continuing your answer to a question may have been 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.

Section One – Research Methods

Question One

(6 marks)

Dr Chaz is planning an experiment to determine the effect of a study strategy called 'mind mapping' on student test scores at Marina Senior College. He used 100, 17-year-old Year 11 Psychology students, 50 of which he taught to use the mind mapping strategy and 50 which he did not.

- a) Write an operational hypothesis for this experiment. (3 marks)

- b) State the population from which the sample was drawn. (1 mark)

- c) State the independent variable: (1 mark)

- d) State the dependent variable: (1 mark)

Question Two

(3 marks)

Cognitive test scores for a group of students are listed below.

2, 1, 7, 9, 5, 5, 4, 11

- a) Calculate the following: (2 marks)

Mean: _____

Median: _____

- b) Explain which measure of central tendency is impacted by outliers in data. (1 mark)

Question Three

(6 marks)

A psychologist wanted to investigate the relationship between temperature and the time taken to complete a maths test. The psychologist required a sample of 60 adults to participate, firstly in a room where the temperature was 16 °C; and secondly in a room where the temperature was 44 °C.

- a) Outline **two** ethical considerations the psychologist must adhere to and **how** they can achieve this. (4 marks)

One:

Two:

- b) Identify whether this is an experimental or non-experimental study and give a reason for your answer. (2 marks)

Question Four**(6 marks)**

A psychologist collected data on the self-esteem of ten young people who were currently involved in volunteer work in their community, using a Likert-scale. The Likert scale produced scores from each person ranging from 10 to 50. Higher scores indicated higher levels of self-esteem.

The self-esteem of 10 young people were:

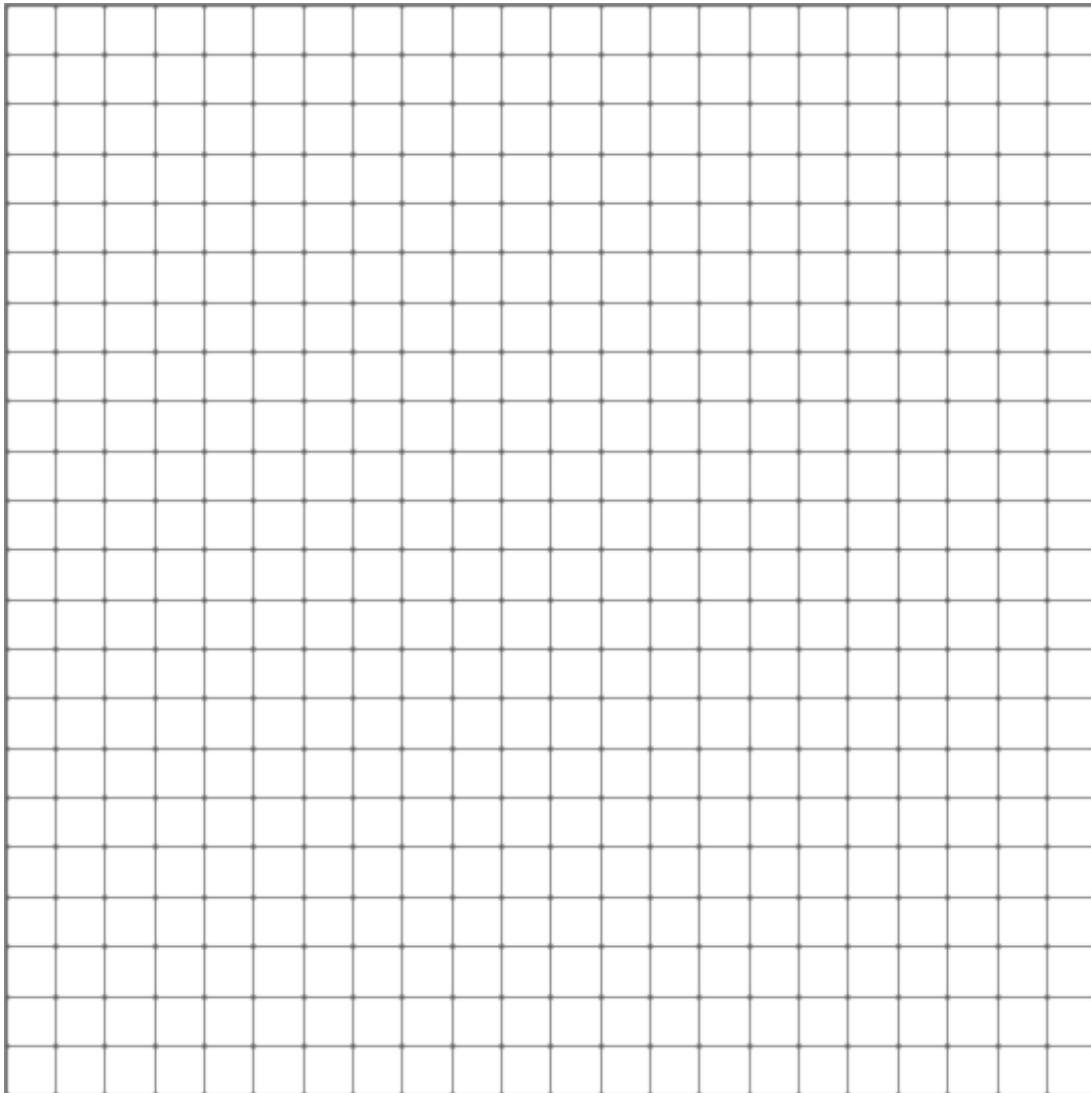
30, 32, 38, 40, 45, 43, 46, 38, 45, 46

a) Complete the frequency table below:

(1 mark)

Self-esteem score	Number of people
11-15	
16-20	
21-25	
26-30	
31-35	
36-40	
41-45	
46-50	
Total	

- b) The psychologist is writing a report on the results of the research and needs to include a graph of the frequency of self-esteem scores. Graph the results from the frequency table below: (5 marks)



Section Two- Short Answer Questions

Question Two – Communication

(10 marks)

- a) Compare the aggressive and assertive communication styles.

(2 marks)

Similarity:

Difference:

- b) List **three** elements of body language.

(3 marks)

- ---
- ---
- ---

- c) Outline the aim, method and conclusions that Matsumoto and Ekman (1989) found in their research on facial expressions

(5 marks)

Question Four – Cognition

(13 marks)

a) Modern tests use deviation IQs. The formula is $IQ = MA/CA \times 100$

i. Identify what the abbreviation 'MA' stands for.

(1 mark)

ii. Identify what the abbreviation 'CA' stands for.

(1 mark)

b) Outline **two** advantages of group intelligence testing.

(2 marks)

c) Jamaal is a grade A student when it comes to child care and hospitality, he finds it easy to understand and respond to the needs of others and finds he picks up fine motor skills in the kitchen really easy such as using a knife properly.

i. According to Howard Gardeners theory of multiple intelligence. What intelligence is Jamaal high in? Explain your answer using examples from the scenario. (3 marks)

iii. Outline the four components of emotional intelligence.

(4 marks)

iv. Is Jamaal high or low in emotional intelligence? Use an example from the scenario as evidence.

(2 marks)

Question Five – Cognition

(18 marks)

- a) State whether or not the following statement is true or false: “all individuals presented with an identical stimulus will process it in the same way”.

Justify your answer with a short description of the processes involved.

(5 marks)

- b) Leonard High School does not allow students to listen to music while doing their classwork due to a large body of published research into the effectiveness of multi-tasking. Using psychological terminology, explain why the school does not allow students to listen to music while they are doing class work. (3 marks)

- a) Define the term consciousness (2 marks)

- b) What is a limitation of using *observation* to measure a person's state of consciousness? (2 marks)

- c) Steven is preparing to complete a timed IQ test. He is feeling alert and slightly anxious before the start of the test, however as soon as the test starts he feels calm and confident. Steven concentrates solidly and without a break for the entire hour-duration of the test. Immediately after completing the IQ test Steven, feeling slightly tired and fatigued at his efforts, sits and daydreams for a short period.

Explain the changes in each of the measures of states of consciousness below that Steven would have experienced from before the IQ test began, through to his daydreaming at the end. (6 marks)

- i. *Body temperature:*

- ii. *Galvanic skin response:*

- iii. *Heart rate:*
