

Surname	Centre Number	Candidate Number
Other Names		2



**GCE A LEVEL**

1290U40-1



**PSYCHOLOGY – A2 unit 4  
Applied Research Methods**

FRIDAY, 7 JUNE 2019 – AFTERNOON

1 hour 30 minutes

For Examiner's use only		
Question	Maximum Mark	Mark Awarded
1.	19	
2.	11	
3.	10	
4.	10	
5.	10	
<b>Total</b>	<b>60</b>	

**INSTRUCTIONS TO CANDIDATES**

Use black ink or black ball-point pen. Do not use pencil or gel pen. Do not use correction fluid.

Write your name, centre number and candidate number in the spaces at the top of this page.

Answer **all** questions.

Write your answers in the spaces provided in this booklet.

If you run out of space, use the additional page(s) at the back of the booklet, taking care to number the question(s) correctly.

You may require a calculator and a ruler.

**INFORMATION FOR CANDIDATES**

The number of marks is given in brackets at the end of each question or part-question.

You are reminded of the necessity for good English and orderly presentation in your answers.

Assessment will take into account the quality of written communication used in your answers.



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**SECTION A – Personal investigations**

You should answer **all** the questions in this section with reference to the personal investigations carried out in your study of psychology.

**INVESTIGATION ONE:**

**Experiment on the Chameleon effect.**

1. (a) (i) State the alternative/experimental hypothesis for your experiment. [3]

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(ii) Identify the independent variable (IV) from your alternative/experimental hypothesis. [1]

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(iii) Identify the dependent variable (DV) from your alternative/experimental hypothesis. [1]

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(b) Discuss the ethical issues you faced when planning your experiment. Explain how you ensured the participants were treated ethically. [10]

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(c) Discuss how you assessed reliability in your experiment.

[4]



**INVESTIGATION TWO:**  
**Questionnaire on relationships.**

2. (a) State **one** finding from your investigation. [2]

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(b) State the sampling method you used and explain how you collected your participants. [3]

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(c) Suggest **two** ways you could improve your investigation. [3+3]

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**SECTION B – Application of research methods to novel scenarios**

*Answer all questions.*

3. A psychologist investigated the number of words correctly recalled by an individual recovering from a brain injury. The individual was selected using an opportunity sample of patients admitted to a local hospital with a brain injury. Using a case study, the researcher recorded the number of words the individual could correctly remember from a list of ten words presented one month after the brain injury and presented again six months after the brain injury. The psychologist recorded the results in the table below.

*Table with the words correctly recalled one month after brain injury and six months after brain injury.*

<b>Words correctly recalled one month after brain injury.</b>	<b>Words correctly recalled six months after brain injury.</b>	
Dog	Dog	Pencil
Ball	Ball	Hospital
Door	Door	Cardigan
	Desk	
	Apple	

- (a) State and explain **three** changes that could be made to improve this research. [2+2+2]

In your answer you could include:

- Choice of sample.
- Research method.
- Any other appropriate improvement.

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(b) Suggest another task that could be completed by the individual recovering from a brain injury and explain how this would increase the validity of the results. [4]

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4. It has been argued by academics that males are more aggressive than females. Research on human aggression, however, can lead to many ethical issues.

(a) (i) Suggest and explain a way to investigate the above argument and operationalise aggression. [4]

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(ii) With reference to the above argument and your suggestion from (a) (i), explain **two** ways you could ensure that the research is ethical. [3+3]

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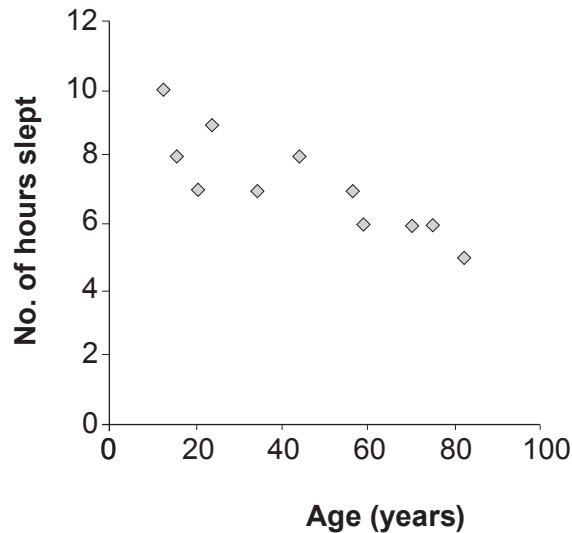
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5. A psychologist conducted a correlation between age and the amount of sleep. The psychologist asked an opportunity sample of friends and family members to estimate the amount of sleep they had during the previous night, to the nearest hour. The psychologist also noted their age in years. The data was plotted on the scatter diagram below.

Scatter diagram to demonstrate the correlation between age and the amount of sleep



- (a) Justify the psychologist's use of a scatter diagram to display these results. [2]

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- (b) (i) Give **one** reason why a Wilcoxon matched pairs signed ranks test would be an incorrect choice of test to analyse the data in this piece of research. [1]

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- (ii) State which test would be more appropriate for this data. [1]

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(c) Identify an extraneous variable that could affect this piece of research.

[2]

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(d) Identify and explain **one** issue of validity that could affect this study. Suggest a way to improve this.

[4]

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**END OF PAPER**





Question number	<b>Additional page, if required.</b> <b>Write the question number(s) in the left-hand margin.</b>
	Dotted lines for writing

Examiner only



