Surname	Centre Number	Candidate Number
First name(s)		2

GCE A LEVEL

1290U40-1

Z22-1290U40-1

WEDNESDAY, 8 JUNE 2022 – MORNING

PSYCHOLOGY – A2 unit 4
Applied Research Methods

1 hour 30 minutes

For Examiner's use only		
Question	**Maximum Mark**	**Mark Awarded**
1.	**19**	
2.	**11**	
3.	**16**	
4.	**14**	
Total	**60**	

1290U401
01

ADDITIONAL MATERIALS

You may require a calculator and a ruler.

INSTRUCTIONS TO CANDIDATES

Use black ink or black ball-point pen. Do not use gel pen or 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. Additional space is provided for some questions within the booklet (if required). If further space is required for any question, you should use the additional page(s) at the back of the booklet, taking care to number the question(s) correctly.

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:

An experiment on helping behaviour.

1. (a) (i) Explain how the independent variable was operationalised within your experiment. [2]

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(ii) Explain why you chose to operationalise the independent variable in this way. [2]

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(b) (i) Explain how the dependent variable was operationalised within your experiment. [2]

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(ii) Explain why you chose to operationalise the dependent variable in this way. [2]

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(c) Identify **one** extraneous variable you considered before conducting your experiment and explain how you dealt with this. [3]

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(d) Justify how you analysed the data in your experiment. Your discussion should include your use of:

(i) graphical representations. [2]

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(ii) descriptive statistics. [2]

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(iii) inferential statistics. [4]

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INVESTIGATION TWO:

An interview on the use of social media.

2. (a) Describe the features of the participants used in your interview. [2]

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(b) Justify the way you assessed the reliability of your interview. [2]

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(c) There are different types of interview, such as structured interviews and semi-structured interviews. Justify the type of interview used in your investigation. [2]

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(d) State **one** conclusion from your interview. [2]

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(e) Discuss **one** improvement that could be made to your investigation. [3]

Additional space for question **2**(e) only:

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SECTION B – Application of research methods to novel scenarios

Answer **all** questions.

3. A psychology teacher predicted that giving students regular homework improved grades in GCSE exams. To test the hypothesis, she assigned students to one of two groups without their knowledge. One group of students was given homework three times a week. No homework was given to the second group of students. The exam grades of the two groups were compared and led to the conclusion that homework does have a positive effect on students' performance in exams.

(a) State and explain the experimental design used in this piece of research. [2]

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(b) Describe an appropriate sampling method the teacher could have used for this research. [2]

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(c) (i) Discuss **three** ethical issues that have arisen in this research. [2+2+2]

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(ii) Explain how you would deal with the **three** ethical issues you have discussed in (c)(i). [2+2+2]

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4. A Developmental Psychologist wanted to investigate infants' colour preferences. She collected an opportunity sample of five infants (one boy and four girls) in order to observe them playing with toys. Firstly, she gave the infants blue toys. Next, she gave them pink toys. Finally, she gave them green toys. She recorded the time each infant spent playing with toys of each colour before they looked bored. The results of the research can be seen below:

	Blue toys	**Pink toys**	**Green toys**
Mean time in minutes spent playing before the infants looked bored	5	3	1

(a) Using data from the above table state an appropriate conclusion for this piece of research. [2]

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(b) Identify the level of measurement of the data collected in this research. [1]

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(c) (i) Identify the experimental design of the above research. [1]

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(ii) Define the experimental design you identified in (c)(i). [2]

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(d) The Developmental Psychologist asked a colleague to review this research. Discuss the improvements that could be suggested by the review. [8]

END OF PAPER

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