

Please write clearly in block capitals.

Centre number

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Candidate number

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Surname

Forename(s)

Candidate signature

I declare this is my own work.

A-level PSYCHOLOGY

Paper 2 Psychology in context

Time allowed: 2 hours

Materials

For this paper you may use:

- a calculator.

Instructions

- Use black ink or black ball-point pen.
- Fill in the boxes at the top of this page.
- Answer **all** questions. You must answer the questions in the spaces provided. Do **not** write outside the box around each page or on blank pages.
- If you need extra space for your answer(s), use the lined pages at the end of this book. Write the question number against your answer(s).
- Do all rough work in this book. Cross through any work you do not want to be marked.

Information

- The marks for questions are shown in brackets.
- The maximum mark for this paper is 96.
- Questions should be answered in continuous prose. You will be assessed on your ability to:
 - use good English
 - organise information clearly
 - use specialist vocabulary where appropriate.

For Examiner's Use	
Section	Mark
A	
B	
C	
TOTAL	



Section A**Approaches in psychology**

Answer **all** questions in this section.

0 1

Outline the way in which Pavlov studied classical conditioning.

[4 marks]

0 2

Some critics have said that Pavlov's studies may lack ecological validity.

What is meant by the term ecological validity?

[2 marks]



0 3

Jemima and Lily are identical twins. Lily complains to Jemima, “I don’t understand it. If we have the same genes, how come you have clearer skin than me and are much better at netball?”

Jemima laughs and replies, “Lily, we may be identical twins, but we are not identical people.”

Using your knowledge of genotype and phenotype, explain Lily’s **and** Jemima’s comments.

[4 marks]

Turn over for the next question

Turn over ►



0 4

Lily and Jemima have a pet rat, which usually hides in a corner when they try to take it out of its cage. They have tried different ways to stop the rat hiding, but so far without success.

Use your knowledge of **two** types of reinforcement to suggest how Lily and Jemima could train their rat to come to the cage door when they open it.

[6 marks]

Extra space



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Section B

Biopsychology

Answer **all** questions in this section.

0 6

Describe the structure **and** function of a neuron.

[6 marks]

0 7

Studies have identified Broca's area and Wernicke's area as responsible for language.

Outline the difference in function between Broca's area and Wernicke's area.

[2 marks]

Turn over ►



0 8

Discuss ways of studying the brain.

[16 marks]

You may use this space to plan your answer.



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24

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Section C


Research methods


Answer **all** questions in this section.

Only **one** answer per question is allowed.

For each question completely fill in the circle alongside the appropriate answer.

CORRECT METHOD WRONG METHODS

If you want to change your answer you must cross out your original answer as shown. 

If you wish to return to an answer previously crossed out, ring the answer you now wish to select as shown. 

A researcher placed an advert in a university psychology department asking for third year students to participate in a sleep experiment.

Each student had a sleep tracker watch to wear at home for the two-week study. Each morning they were asked to open the sleep tracker app to view their sleep quality data on their mobile phones. The students were unaware that the sleep data they could see on their phones had been manipulated by the researcher. Over the two weeks of the study, each student saw that he or she had had poor sleep quality for seven random nights of the experiment and good sleep quality for the remaining nights.

Every morning, after viewing the sleep data, each student completed a questionnaire about the previous night's sleep. One of the questions asked the students to rate how well rested they felt, on a scale from 1–10, after the previous night's sleep. Apart from this, students were asked to continue their normal everyday activities.

0 9 Which of the following best describes the experimental method used in this study?

Shade **one** box only.

[1 mark]

- | | |
|--------------------------------|-----------------------|
| A Field experiment | <input type="radio"/> |
| B Laboratory experiment | <input type="radio"/> |
| C Natural experiment | <input type="radio"/> |
| D Quasi-experiment | <input type="radio"/> |



1 0

Write a directional hypothesis the researcher might use for this study.

[3 marks]

1 1

Which of the following best describes the sampling method used in this study?

Shade **one** box only.

[1 mark]

A Opportunity sampling

B Stratified sampling

C Systematic sampling

D Volunteer sampling

1 2

Explain **one** strength **and one** limitation of using this sampling method in this study.

[4 marks]

Turn over ►



The researcher collected quantitative data about how well rested the students felt.

1 3

Explain **one** strength of collecting quantitative data in this study.

[2 marks]

One ethical issue in this study is deception, as the students were unaware that the sleep data they could see on their phones had been manipulated by the researcher.

1 4

Explain **one** way in which the researcher might deal with the deception in this study.

[2 marks]

Apart from the question about how well rested the students felt, the researcher's questionnaire contained nine other questions. The responses to these questions were not analysed.

1 5

Explain **one** reason why the researcher decided to include these additional questions on the questionnaire.

[2 marks]



1 6

Explain **one** limitation of assessing sleep quality using a rating scale of 1–10.

[2 marks]

The researcher believed that the actual number of hours slept by the students could have affected the results of the study.

1 7

Suggest **one other** extraneous variable that could have affected the results of this study. Explain why it would have been important to control this extraneous variable and how it could have been controlled in this study.

[4 marks]

Extra space

Turn over for the next question

Turn over ►



In a follow-up study, the researcher investigated whether there was a correlation between the number of hours slept and how well rested the students felt.

The researcher randomly selected 18 participants from first-year students at the university.

On the day of the study, each student participant was asked, 'How many hours did you sleep last night?' They then had to rate on a scale of 1 to 5 how well rested they felt.

The researcher hypothesised that there would be a positive correlation between the two co-variables.

1 8

Outline **one** reason why it was appropriate to conduct a correlation rather than an experiment in this case.

[2 marks]

1 9

Describe how the researcher could have used random sampling to obtain the students for this study.

[3 marks]



The researcher used Spearman's rho statistical test to analyse the data from this study.

2 0

Explain why Spearman's rho was a suitable test for this study. Refer to the description of the study in your answer.

[4 marks]

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The researcher chose to use the 5% level of significance and the calculated correlation coefficient for the Spearman's rho test was 0.395

Table 1 Critical values of rho

Level of significance for a one-tailed test	0.05	0.025
Level of significance for a two-tailed test	0.10	0.05
N = 16	0.429	0.503
17	0.414	0.485
18	0.401	0.472
19	0.391	0.460
20	0.380	0.447

The calculated value of rho must be greater than or equal to the critical value to be significant.

2 | **1**

Identify the appropriate critical value from **Table 1**. Explain your choice.

[4 marks]

Extra space _____



2 | 2

Explain whether the researcher's hypothesis should be accepted. Refer to the critical value identified in **Question 21** in your answer.

[2 marks]

2 | 3

Explain why the researcher decided to use the 5% level of significance rather than the 1% level in this study.

[2 marks]

When the researcher compared the calculated and critical values of rho, he began to wonder if he might have made a Type II error.

2 | 4

Explain what is meant by a Type II error in the context of this study.

[2 marks]

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ANSWER IN THE SPACES PROVIDED**



Question number	<p>Additional page, if required. Write the question numbers in the left-hand margin.</p>
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