



Please write clearly in block capitals.

Centre number

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Candidate number

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Surname _____

Forename(s) _____

Candidate signature _____

A-level PSYCHOLOGY

Paper 2 Psychology in context

Friday 7 June 2019

Afternoon

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

For each answer 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.

**0 1** According to the biological approach, which of the following statements is **TRUE**?Shade **one** circle only.**[1 mark]****A** Environment may influence the expression of the genotype.☐**B** Genotype is just the expression of the environment.☐**C** Outside influences cannot affect the expression of the genotype.☐**D** Phenotype is only the expression of the genotype.☐**0 2** According to operant conditioning, which of the following statements is **TRUE**?Shade **one** circle only.**[1 mark]****A** Negative reinforcement and positive reinforcement decrease the likelihood that a behaviour will be repeated.☐**B** Negative reinforcement and positive reinforcement increase the likelihood that a behaviour will be repeated.☐**C** Negative reinforcement and punishment decrease the likelihood that a behaviour will be repeated.☐**D** Negative reinforcement and punishment increase the likelihood that a behaviour will be repeated.☐

0 5

The company paid the rugby player a lot of money to be in the advert.

Use your knowledge of social learning theory to explain why the company wanted to use a famous rugby player in the advert.

[2 marks]

There was an overall increase in sales of Tiger following the advertisement campaign. Interestingly, the increase in sales was greater for male customers than for female customers. See **Table 1** below.

Table 1 Sales figures before and after the Tiger advert

	Females	Males
Before the advert	3882	2522
After the advert	3395	4688

0 6

Calculate the percentage increase in sales of Tiger to male customers. Give your answer to **two** significant figures.

Show your workings.

[3 marks]



Section B

Biopsychology

Answer **all** questions in this section.

0 9

Which method of studying the brain would most accurately identify specific brain areas activated during a cognitive task?

Shade **one** circle only.

[1 mark]

A Electroencephalogram (EEGs)

☐

B Event-related potentials (ERPs)

☐

C Functional magnetic resonance imaging (fMRI)

☐

D Post-mortem examinations

☐

Turn over for the next question

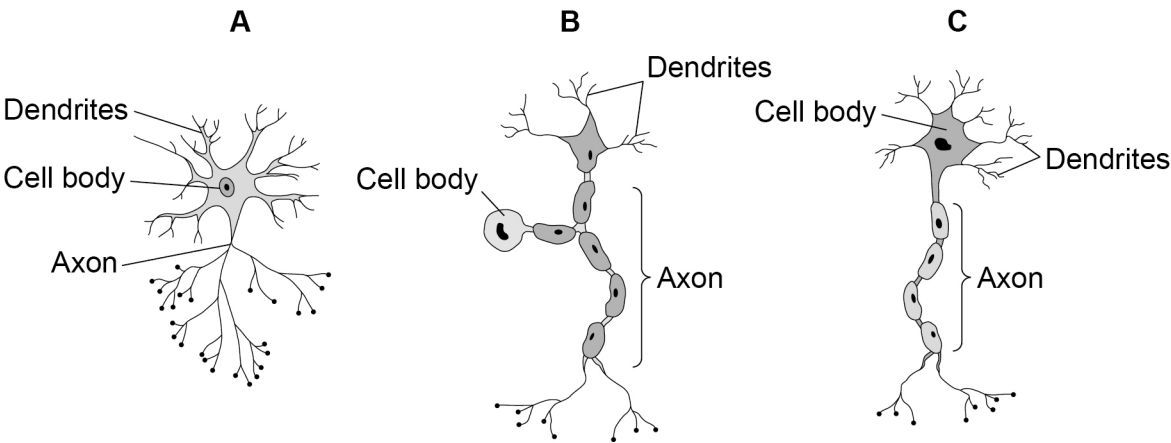
Turn over ►



1 0

Figure 1 shows three different types of neuron. Use the letters from **Figure 1** to answer the following questions.

Figure 1 Types of neuron



1 0 . 1

Which neuron is only found in the brain/visual system/spinal cord?

[1 mark]

- A
- B
- C

1 0 . 2

Which neuron carries nerve impulses from the brain/spinal cord to muscles/glands?

[1 mark]

- A
- B
- C



Extra space



Section C

Research methods

Answer **all** questions in this section.

1 3 Which of the following does reliability refer to?

Shade **one** circle only.

[1 mark]

- A The accuracy of the data ☐
- B The consistency of the data ☐
- C The levels of the data ☐
- D The validity of the data ☐

1 4 Which of the following is **not** a role of peer review in the scientific process?

Shade **one** circle only.

[1 mark]

- A To determine whether to award research funding ☐
- B To ensure only significant results are published ☐
- C To make sure research has high validity and reliability ☐
- D To retain the integrity of psychological research ☐

1 5 Give **one** reason why it is important for scientific reports to include a referencing section?

[1 mark]



It was recently reported in a newspaper that time spent playing team sports increases happiness levels. A researcher was keen to find out whether this was due to participating in a team activity or due to participating in physical activity, as he could not find any published research on this.

The researcher used a matched-pairs design. He went into the student café and selected the first 20 students he met. Each student was assigned to one of two groups.

Participants in **Group A** were requested to carry out 3 hours of team sports per week. Participants in **Group B** were requested to carry out 3 hours of exercise independently in a gym each week. All participants were told not to take part in any other type of exercise for the 4-week duration of the study.

All participants completed a happiness questionnaire at the start and end of the study. The researcher then calculated the improvement in happiness score for each participant.

1 6 Which of the following is correct?

Shade **one** circle only.

[1 mark]

- A** Groups A and B are conditions of the dependent variable and happiness is the independent variable. ☐
- B** Groups A and B are conditions of the independent variable and happiness is the dependent variable. ☐
- C** Groups A and B are the controls and happiness is the experimental condition. ☐
- D** Groups A and B are the experimental conditions and happiness is the control. ☐

1 7 Would a directional or non-directional hypothesis be more suitable for the researcher to use? Explain your answer.

[2 marks]

Extra space

Turn over ►



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1 8

Write a suitable hypothesis for this experiment.

[3 marks]

Extra space

1 9

Identify the type of sampling method used in this experiment. Explain **one** limitation of using this sampling method in this study.

[3 marks]

Extra space



2 0

Identify **one** variable on which participants should be matched in this matched-pairs design. Explain how the researcher could assign matched participants to either **Group A** or **Group B**.

[4 marks]

Extra space

2 1

Explain **one** strength of using a matched-pairs design rather than a repeated-measures design.

[2 marks]

Extra space

Turn over for the next question

Turn over ►



The results of the study are given in **Table 2**, below.

Table 2 Improvement in happiness scores

	Team sports Group A	Independent sport Group B
Pair 1	0	2
Pair 2	14	8
Pair 3	4	4
Pair 4	−1	1
Pair 5	3	3
Pair 6	12	5
Pair 7	8	7
Pair 8	15	8
Pair 9	7	8
Pair 10	3	2

The researcher decided to use the Sign Test to see whether there was a significant difference in the improvement in the scores between the two groups at the 5% level of significance.

2 2

Calculate the value of **S** in this study. Show your workings.

[2 marks]



Table 3 Table of critical values of the sign test (S)

	Level of significance for a two-tailed test		
N	0.10	0.05	0.01
7	0	0	
8	1	0	0
9	1	1	0
10	1	1	0
11	2	1	0
12	2	2	1

Significance is shown if the calculated value of S is **equal to or less than** the critical value.

23

Explain whether or not there was a significant difference in the improvement in the scores between the two groups. Use your answer to **Question 22** and **Table 3**.

[2 marks]

Turn over for the next question

Turn over ►



The validity of the data was questioned when the researcher presented his results. The researcher explained that he chose to use the happiness questionnaire because it had high concurrent validity.

2 4

Explain what it means for a test to have high concurrent validity.

[2 marks]

Extra space

2 5

The questionnaire had high concurrent validity.

Validity was still a concern because the researcher knew which participants were in each experimental group.

Explain how this could have affected the validity of the study.

[4 marks]

Extra space



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2 6

Using your answer to **Question 25**, suggest **one** way in which the researcher could modify the study to improve the internal validity of the study? Justify your answer.

[4 marks]

Extra space

A psychology teacher read the researcher’s study on sport and happiness. She considered whether setting group tasks could improve her students’ level of happiness. She decided to conduct an independent groups experiment with 30 students taking A-level Psychology using the same happiness questionnaire.

2 7

Suggest an appropriate statistical test the psychology teacher could use to analyse the data. Justify your choice of test.

[4 marks]

Turn over ►



2	8
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Design an independent groups experiment that the psychology teacher could conduct.

In your answer you should provide details of:

- the aim of the experiment
- identification and manipulation of variables including details of the task
- controls to minimise the effects of extraneous variables
- data handling and analysis – use of descriptive statistics and/or data presentation.

Justify your design choices.

[12 marks]

You may use this space to plan your answer.



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