

Paper Reference 8PS0/02
Pearson Edexcel
Level 3 GCE

Total Marks

Psychology
Advanced Subsidiary
Paper 2: Biological Psychology
and Learning Theories

Thursday 16 May 2019 – Afternoon

**Time: 1 hour 30 minutes plus your
additional time allowance.**

**In the boxes below, write your name,
centre number and candidate number.**

Surname					
Other names					
Centre Number					
Candidate Number					

You do not need any other materials

YOU WILL BE GIVEN

Data Book

Formulae and Statistical Tables

INSTRUCTIONS

Answer ALL questions.

Answer the questions in the spaces provided in this Question Paper or on the separate data sheets – there may be more space than you need.

Turn over

INFORMATION

The total mark for this paper is 70

The marks for EACH question are shown in brackets – use this as a guide as to how much time to spend on each question.

The list of formulae and statistical tables are printed in a separate booklet.

Candidates may use a calculator.

There may be spare copies of some data sheets.

ADVICE

Read each question carefully before you start to answer it.

Check your answers if you have time at the end.

Answer ALL questions.

SECTION A:

BIOLOGICAL PSYCHOLOGY

1. Scanning techniques have been used in biological psychology.

(a) State the purpose of the PET brain–scanning technique.

(1 mark)

(continued on the next page)

1. continued.

**(b) Explain ONE strength and
ONE weakness of the PET
brain–scanning technique.**

(4 marks)

**Answer lines continue on the
next two pages.**

Strength

Turn over

1. (b) continued.

Weakness

1. (b) continued.

(Total for Question 1 = 5 marks)

2. In biological psychology you will have learned about one of the following contemporary studies:

- Li et al. (2013)**
- Brendgen et al. (2005)**
- Van den Oever et al. (2008)**

(a) Describe the procedure of your chosen contemporary study.

(3 marks)

Answer lines continue on the next page.

Turn over

2. (a) continued.

(continued on the next page)

Turn over

2. continued.

**(b) Explain ONE strength and
ONE weakness of your chosen
contemporary study.**

(4 marks)

**Answer lines continue on the
next two pages.**

Strength

Turn over

2. (b) continued.

Weakness

Turn over

2. (b) continued.

(Total for Question 2 = 7 marks)

3. Refer to the diagram for Question 3 in the Data Book.

Daniel carried out an investigation to find out if exercise was related to self-reported “wellbeing”. He visited his local gym and asked members to record how many hours of exercise they do over a week.

At the end of the week, they all met in the gym coffee shop where Daniel asked each person to complete a “wellbeing” questionnaire.

The questionnaire consisted of four questions; an example is shown in the diagram.

(continued on the next page)

Turn over

3. continued.

The responses were given an overall score between 4 and 20, with a high score indicating high “wellbeing”.

(a) State a fully operationalised non-directional (two-tailed) alternate hypothesis for Daniel’s investigation.

(2 marks)

Answer lines continue on the next page.

Turn over

3. (a) continued.

(continued on the next page)

3. continued.

**Refer to Table 1 and Table 2 for
Question 3(b) in the Data Book.**

**The results of Daniel's investigation
are shown in Table 1.**

**(b) Complete Table 2 and calculate
Spearman's rank correlation
coefficient between the number
of hours exercised in a week and
a "wellbeing" score between
4 and 20**

(4 marks)

**Space for calculations is on the
next page.**

Turn over

3. (b) continued.

**Spearman's rank correlation
coefficient**

(continued on the next page)

Turn over

3. continued.

(c) The participant sample in Daniel's investigation consisted of eight males and two females.

Calculate what fraction of Daniel's sample were male.

You must express your answer in its simplest form.

(1 mark)

Space for calculations continues on the next page.

Turn over

3. (c) continued.

Fraction _____

(continued on the next page)

3. continued.

- (d) Explain ONE improvement that Daniel could make to increase the validity of his investigation.**
- (2 marks)**

(Total for Question 3 = 9 marks)

Turn over

4. Evaluate the role of the central nervous system (CNS) and neurotransmitters in explaining human behaviour.
(8 marks)

Answer lines continue on the next six pages.

4. continued.

Turn over

4. continued.

Turn over

4. continued.

Turn over

4. continued.

Turn over

4. continued.

Turn over

4. continued.

(Total for Question 4 = 8 marks)

TOTAL FOR SECTION A = 29 MARKS

Turn over

SECTION B: LEARNING THEORIES

5. When studying learning theories, you will have learned about different types of observations.

(a) Define what is meant by a naturalistic observation.

(1 mark)

(continued on the next page)

Turn over

5. continued.

**(b) Explain ONE strength and
ONE weakness of the naturalistic
observation method.**

(4 marks)

**Answer lines continue on the
next two pages.**

Strength

Turn over

5. (b) continued.

Weakness

Turn over

5. (b) continued.

(Total for Question 5 = 5 marks)

6. In learning theories you will have studied classical conditioning.

(a) Describe ‘spontaneous recovery’ as a feature of classical conditioning.

(2 marks)

Answer lines continue on the next page.

6. (a) continued.

(continued on the next page)

6. continued.

(b) Anastasia fell off her bike several times whilst listening to her favourite band, Camban. Every time Anastasia now listens to the music of her favourite band Camban she feels afraid.

Using classical conditioning, describe how Anastasia became afraid of her favourite band Camban.

(4 marks)

Answer lines are on the next two pages.

Turn over

6. (b) continued.

Turn over

6. (b) continued.

(Total for Question 6 = 6 marks)

7. Refer to the table for Question 7 in the Data Book.

Brian completed a study that investigated anti-social behaviour in seven popular television programmes filmed in 2000 and 2016. He watched four hours of each programme and came up with a list of themes, such as swearing, name calling and kicking. Brian recorded the number of instances of anti-social behaviour according to each of the themes.

The table shows the results of Brian's analysis.

(continued on the next page)

Turn over

7. continued.

**(a) Calculate the mode for the
number of anti–social behaviours
recorded in programmes filmed
in 2000**

(1 mark)

SPACE FOR CALCULATIONS

Mode score _____

(continued on the next page)

Turn over

7. continued.

**(b) Calculate the range for the
number of anti–social behaviours
recorded in programmes filmed
in 2016**

(1 mark)

SPACE FOR CALCULATIONS

Range _____

(continued on the next page)

Turn over

7. continued.

(c) Explain ONE strength and ONE weakness of Brian using thematic analysis to analyse the television programmes.

(4 marks)

Answer lines continue on the next two pages.

Strength

Turn over

7. (c) continued.

Weakness

Turn over

7. (c) continued.

(Total for Question 7 = 6 marks)

- 8. Denise wanted to investigate whether rewards could encourage the six-year-old pupils in her class to learn their mathematical calculations. She plans to give each pupil a 'smiley' sticker when they get a set of mathematical calculations correct.**

Explain TWO ways that Denise could make sure her investigation is scientific.

(4 marks)

Answer lines continue on the next two pages.

8. continued.

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Turn over

8. continued.

This image shows a blank sheet of white paper with ten horizontal black lines. The lines are evenly spaced and run across the width of the page, providing a template for writing or drawing.

(Total for Question 8 = 4 marks)

Turn over

- 9. Evaluate operant conditioning as a way of explaining human behaviour. (8 marks)**

Answer lines continue on the next five pages.

9. continued.

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9. continued.

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(Total for Question 9 = 8 marks)

TOTAL FOR SECTION B = 29 MARKS

Turn over

SECTION C

10. Melissa is a 16-year-old girl who has started to wear make-up like her favourite celebrity. She went shopping and bought new clothes like the ones she had seen in fashion magazines.

Melissa goes to the park with her friends, wearing her new clothes. At the park they see a group of boys playing football. The boys stop playing football and smile at Melissa and her friends.

(continued on the next page)

Turn over

10. continued.

After seeing the girls, some of the boys then began playing football more aggressively and shouting at one another.

Evaluate how evolutionary theory and social learning theory can explain human behaviour. You must make reference to the context in your answer.

(12 marks)

Answer lines continue on the next nine pages.

10. continued.

Turn over

10. continued.

Turn over

10. continued.

Turn over

10. continued.

Turn over

10. continued.

Turn over

10. continued.

Turn over

10. continued.

Turn over

10. continued.

Turn over

10. continued.

(Total for Question 10 = 12 marks)

TOTAL FOR SECTION C = 12 MARKS

TOTAL FOR PAPER = 70 MARKS

END OF PAPER
