

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

Which **one** of the columns in **Figure 1**, A, B, C or D shows the correct arrangement of levels in Maslow's hierarchy of needs? Shade **one** box only.

Figure 1

Top of hierarchy			
A	B	C	D
Self-actualisation	Self-actualisation	Love/belongingness	Love/belongingness
Love/belongingness	Esteem	Esteem	Self-actualisation
Esteem	Love/belongingness	Self-actualisation	Safety
Safety	Safety	Physiological	Esteem
Physiological	Physiological	Safety	Physiological
Bottom of hierarchy			

Column A

Column B

Column C

Column D

[1 mark]

0 2

Which of the following sentences best describes Wundt's method of introspection?
Shade **one** box only.

Introspection involves ...

- A performing mental calculations.
- B reporting present experience.
- C describing events from the past.
- D outlining hopes for the future.

[1 mark]

0 3

Tim used to run a family business. About two years ago, the business got into financial difficulties. Tim's bank demanded repayment of a loan. Tim lost the business and is very angry.

Two defence mechanisms are denial and displacement.

Outline what is meant by denial and displacement and suggest how **each** could be involved in Tim coping with his situation.

[4 marks]

Section B

Biopsychology

Answer **all** questions in this section

0 7

Identify the **two** components of the peripheral nervous system, and explain **two** differences in their organisation and/or functions.

[4 marks]

0 8

Josie is twelve. Last year she was involved in a serious road accident and suffered head injuries that caused problems with speech and understanding language. Now, a year later, Josie has recovered most of her language abilities.

Using your knowledge of plasticity and functional recovery of the brain after trauma, explain Josie's recovery.

[4 marks]

0 9

Which of the following, A, B, C, or D, is a feature of functional magnetic resonance imaging? Shade **one** box only.

- A Directly measuring the electrical activity of neurons using electrodes implanted in the brain.
- B Directly measuring the electrical activity of neurons using electrodes on the scalp.
- C Indirectly measuring the electrical activity of neurons by recording changes in brain blood flow.
- D Indirectly measuring the electrical activity of neurons by recording changes in neurotransmitter release.

[1 mark]

1 0

Identify **two** glands that form part of the endocrinal system and outline their functions.

[4 marks]

1	2
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Raoul has recently been prescribed a drug for a mental illness. He looks on the internet to find out more about the drug but he does not understand the phrase 'synaptic transmission'.

Write a brief explanation of synaptic transmission in the brain to help Raoul understand how his drug might work.

[3 marks]

Section C

Research methods

Answer **all** questions in this section

Read the item and then answer the questions that follow.

Following previous research indicating the social benefits of green space in urban areas, two psychology students decided to observe social behaviour in public spaces. They focused on two neighbouring towns, Greensville where most public spaces were planted with flowers and vegetables, and Brownnton where most public spaces were paved with concrete.

The students compared the instances of considerate behaviours in the two towns. Considerate behaviour categories included putting litter in the bin, having a dog on a lead and riding a bike with care.

The observations were carried out in four different areas of a similar size in each town on weekdays between the hours of 4.30pm and 6.00pm. The students worked together to ensure inter-observer reliability, recording each target behaviour whenever it occurred.

1 3

Should the hypothesis for this research be directional or non-directional? Explain your answer.

[2 marks]

1 4

Before the observation could begin, the students needed to operationalise the behaviour category 'riding a bike with care'.

Explain what is meant by operationalisation and suggest **two** ways in which 'riding a bike with care' could have been operationalised.

[4 marks]

1	5
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The students thought that having a dog on a lead was a useful measure of considerate behaviour because it had face validity. Explain what is meant by face validity in this context.

[3 marks]

1	6
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Identify and briefly outline **two** other types of validity in psychological research.

[4 marks]

1 7

Identify the behaviour sampling method used by the students. Shade **one** box only.

- A Time sampling
- B Pair sampling
- C Event sampling
- D Target sampling

[1 mark]

1 8

Explain how inter-observer reliability could be ensured by working as a pair.

[3 marks]

The data for considerate behaviours is shown in **Table 1**.

Table 1

Considerate behaviours			
	Litter in bin	Dog on lead	Riding bike with care
Greensville	23	12	19
Browntonn	10	17	9

1 9

The students noted that overall more considerate behaviours occurred in Greensville than in Brownton.

Calculate the ratio of considerate behaviours observed in Greensville to considerate behaviours observed in Brownton. Show your workings and present your answer in the simplest form.

[3 marks]

2	0
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The students carried out a Chi-square test on their data.

Explain why the Chi-square test was an appropriate test to use in this case.

[3 marks]

2	1
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In order to interpret the results of the Chi-square test the students first needed to work out the degrees of freedom. They used the following formula.

$$\text{Degrees of freedom (df)} = (r-1) \times (c-1)$$

r = number of rows and c = number of columns

Calculate the degrees of freedom for the data in **Table 1**. Show your workings.

[2 marks]

2 2

The calculated value of Chi-square was 6.20. Referring to **Table 2** below, state whether or not the result of the Chi-square test is significant at the 0.05 level of significance. Justify your answer.

Table 2

df	<i>Levels of significance for a one-tailed test</i>			
	0.10	0.05	0.025	0.01
	<i>Levels of significance for a two-tailed test</i>			
	0.20	0.10	0.05	0.02
1	1.64	2.71	3.84	5.41
2	3.22	4.60	5.99	7.82
3	4.64	6.25	7.82	9.84
4	5.99	7.78	9.49	11.67

To be significant at the level shown the calculated value of Chi Square must be equal to or greater than the critical/table value

[3 marks]

2 3

In the discussion section of their report of the investigation the students wanted to further discuss their results in relation to levels of significance.

Write a short paragraph the students could use to do this.

[4 marks]

2	4
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As a follow-up to their observation the students decided to interview some of their peers about inconsiderate behaviours in their 6th Form Centre. The interviews were recorded.

Explain how the students could develop their interview findings by carrying out a content analysis and why content analysis would be appropriate in this case.

[3 marks]

2	5
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Suggest **one** inconsiderate behaviour that the students might focus on in their content analysis.

[1 mark]

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