Please check the examination details belo	ow before entering your candidate information
Candidate surname	Other names
Centre Number Candidate Nu Pearson Edexcel Interr	national Advanced Level
Tuesday 11 June 202	24
Afternoon (Time: 2 hours)	Paper reference WPS04/01
Psychology International Advanced Le UNIT 4: Clinical Psycholog	
You do not need any other material	Total Marks

### **Instructions**

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided
  - there may be more space than you need.

### Information

- The total mark for this paper is 96.
- 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 at the start of this paper.
- Candidates may use a calculator.

### **Advice**

- Read each question carefully before you start to answer it.
- Try to answer every question.
- Check your answers if you have time at the end.

Turn over ▶





### FORMULAE AND STATISTICAL TABLES

### **Standard deviation (sample estimate)**

$$\sqrt{\left(\frac{\sum(x-\overline{x})^2}{n-1}\right)}$$

# Spearman's rank correlation coefficient

$$1 - \frac{6\sum d^2}{n(n^2 - 1)}$$

### Critical values for Spearman's rank

	Level of significance for a one-tailed test					
	0.05 0.025 0.01 0.005 0.00					
	Level of significance for a two-tailed test					
N	0.10	0.05	0.025	0.01	0.005	
5	0.900	1.000	1.000	1.000	1.000	
6	0.829	0.886	0.943	1.000	1.000	
7	0.714	0.786	0.893	0.929	0.964	
8	0.643	0.738	0.833	0.881	0.905	
9	0.600	0.700	0.783	0.833	0.867	
10	0.564	0.648	0.745	0.794	0.830	
11	0.536	0.618	0.709	0.755	0.800	
12	0.503	0.587	0.678	0.727	0.769	
13	0.484	0.560	0.648	0.703	0.747	
14	0.464	0.538	0.626	0.679	0.723	
15	0.446	0.521	0.604	0.654	0.700	
16	0.429	0.503	0.582	0.635	0.679	
17	0.414	0.485	0.566	0.615	0.662	
18	0.401	0.472	0.550	0.600	0.643	
19	0.391	0.460	0.535	0.584	0.628	
20	0.380	0.447	0.520	0.570	0.612	
21	0.370	0.435	0.508	0.556	0.599	
22	0.361	0.425	0.496	0.544	0.586	
23	0.353	0.415	0.486	0.532	0.573	
24	0.344	0.406	0.476	0.521	0.562	
25	0.337	0.398	0.466	0.511	0.551	
26	0.331	0.390	0.457	0.501	0.541	
27	0.324	0.382	0.448	0.491	0.531	
28	0.317	0.375	0.440	0.483	0.522	
29	0.312	0.368	0.433	0.475	0.513	
30	0.306	0.362	0.425	0.467	0.504	

The calculated value must be equal to or exceed the critical value in this table for significance to be shown.



# **Chi-squared distribution formula**

$$X^{2} = \sum \frac{(O-E)^{2}}{E}$$
  $df = (r-1)(c-1)$ 

# Critical values for chi-squared distribution

Level o	f significance t	for a one-tail	ed test
---------	------------------	----------------	---------

	0.10	0.05	0.025	0.01	0.005	0.0005
	Level of significance for a two-tailed test					
df	0.20	0.10	0.05	0.025	0.01	0.001
1	1.64	2.71	3.84	5.02	6.64	10.83
2	3.22	4.61	5.99	7.38	9.21	13.82
3	4.64	6.25	7.82	9.35	11.35	16.27
4	5.99	7.78	9.49	11.14	13.28	18.47
5	7.29	9.24	11.07	12.83	15.09	20.52
6	8.56	10.65	12.59	14.45	16.81	22.46
7	9.80	12.02	14.07	16.01	18.48	24.32
8	11.03	13.36	15.51	17.54	20.09	26.12
9	12.24	14.68	16.92	19.02	21.67	27.88
10	13.44	15.99	18.31	20.48	23.21	29.59
11	14.63	17.28	19.68	21.92	24.73	31.26
12	15.81	18.55	21.03	23.34	26.22	32.91
13	16.99	19.81	22.36	24.74	27.69	34.53
14	18.15	21.06	23.69	26.12	29.14	36.12
15	19.31	22.31	25.00	27.49	30.58	37.70
16	20.47	23.54	26.30	28.85	32.00	39.25
17	21.62	24.77	27.59	30.19	33.41	40.79
18	22.76	25.99	28.87	31.53	34.81	42.31
19	23.90	27.20	30.14	32.85	36.19	43.82
20	25.04	28.41	31.41	34.17	37.57	45.32
21	26.17	29.62	32.67	35.48	38.93	46.80
22	27.30	30.81	33.92	36.78	40.29	48.27
23	28.43	32.01	35.17	38.08	41.64	49.73
24	29.55	33.20	36.42	39.36	42.98	51.18
25	30.68	34.38	37.65	40.65	44.31	52.62
26	31.80	35.56	38.89	41.92	45.64	54.05
27	32.91	36.74	40.11	43.20	46.96	55.48
28	34.03	37.92	41.34	44.46	48.28	56.89
29	35.14	39.09	42.56	45.72	49.59	58.30
30	36.25	40.26	43.77	46.98	50.89	59.70
40	47.27	51.81	55.76	59.34	63.69	73.40
50	58.16	63.17	67.51	71.42	76.15	86.66
60	68.97	74.40	79.08	83.30	88.38	99.61
70	79.72	85.53	90.53	95.02	100.43	112.32

The calculated value must be equal to or exceed the critical value in this table for significance to be shown.



### **Wilcoxon Signed Ranks test process**

- · Calculate the difference between two scores by taking one from the other
- Rank the differences giving the smallest difference Rank 1

Note: do not rank any differences of 0 and when adding the number of scores, do not count those with a difference of 0, and ignore the signs when calculating the difference

- Add up the ranks for positive differences
- Add up the ranks for negative differences
- T is the figure that is the smallest when the ranks are totalled (may be positive or negative)
- N is the number of scores left, ignore those with 0 difference

### **Critical values for the Wilcoxon Signed Ranks test**

	0.05	0.025	0.01			
	Level of sign	Level of significance for a two-tailed test				
n	0.1	0.05	0.02			
N=5	0	-	_			
6	2	0	_			
7	3	2	0			
8	5	3	1			
9	8	5	3			
10	11	8	5			
11	13	10	7			
12	17	13	9			

The calculated value must be equal to or less than the critical value in this table for significance to be shown.



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# **SECTION A**

# **Clinical Psychology**

# Answer ALL questions. Write your answers in the spaces provided.

1	in your studies of clinical psychology, you will have learned about schizophrenia.	
	(a) Give <b>one</b> symptom of schizophrenia.	(1)
	(b) Describe the function of neurotransmitters as an explanation for schizophrenia.	(4)



of neurotransmitters.	other than the func	(6)
		(0)
	 tal for Question 1	



c) Explain <b>two</b> strengths of the	study by Suzuki e	et al. (2014) in terms	of validity. (4)
		(Total for Ou	estion 2 = 7 marks)

3	Amy is planning to research the effectiveness of Cognitive Behavioural Therapy (CBT). She plans to use an interview to gather qualitative and quantitative data from patients who are taking part in Cognitive Behavioural Therapy (CBT).	
	Amy visits a therapist who gives permission for her to approach their patients to take part in the research.	
	(a) Describe how Amy could use an opportunity sampling technique to gather the participants for her research.	(2)
	(b) Describe how Amy could plan her interview to investigate the effectiveness of Cognitive Behavioural Therapy (CBT).	
		(4)



(c) Explain <b>two</b> strengths of Amy using an interview to investigate the effectivenes of Cognitive Behavioural Therapy (CBT).	s (4)
	( - /
)	
(Total for Question 3 = 10 r	marks)

4	Rahul has been finding it difficult to take part in his usual daily activities. He has	
	found it increasingly difficult to leave his house. Rahul feels worried and nervous when meeting new people and he has stopped attending social events with his friends.	
	A psychiatrist and their trainee have both independently diagnosed Rahul with the same mental health condition using the DSM classification system. Rahul's treatment is helping him return to his usual daily activities.	
	(a) Describe how Rahul's mental health condition could be defined as a failure to function adequately.	(0)
		(2)
	(b) Explain <b>one</b> reason why Rahul believes his diagnosis is valid.	(2)
		(2)
	(Total for Question 4 = 4 ma	rks)
_		

**TOTAL FOR SECTION A = 32 MARKS** 



# BLANK PAGE QUESTION 5 BEGINS ON THE NEXT PAGE.

### **SECTION B**

# **Clinical Psychology**

Answer the question. Write your answer in the space provided.

5	Evaluate the effectiveness of family therapy as a treatment for schizophrenia.	(16)






**TOTAL FOR SECTION B = 16 MARKS** 



#### **SECTION C**

### **Psychological Skills**

### Answer ALL questions. Write your answers in the spaces provided.

- **6** Beverley is a school nurse investigating healthy eating habits in children. She counts how many children choose to eat fruit, cake or both for a snack during breaktime at a school.
  - (a) Identify the level of measurement for Beverley's data.

(1)

The results of Beverley's investigation are shown in **Figure 1**.

# Bar chart showing the number of children who chose each type of food for a snack during breaktime at school

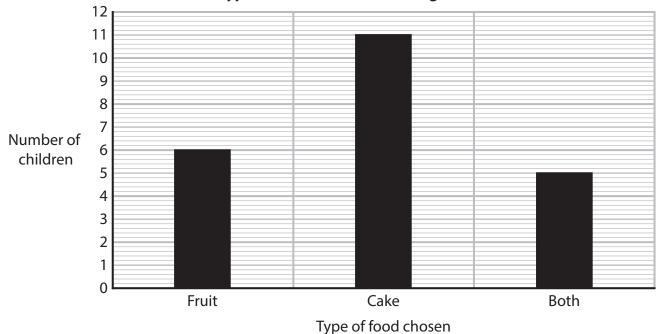


Figure 1

(b) Identify the modal (mode) food type chosen by the children from **Figure 1**.

(1)

Modal food type

(c)	Calculate the ratio of children who chose only fruit to those who chose only cake.  You <b>must</b> give your answer in the lowest form.	(1)
	Space for calculations	
	Ratio	
(d)	Calculate the percentage of children who chose only fruit as their snack out of all the children in Beverley's investigation.	
	You <b>must</b> give your answer to <b>two</b> decimal places.	(1)
	Space for calculations	
	Percentage	
	(Total for Question 6 = 4 ma	



7 Jamie investigated gender differences in obedience by observing males and females at a train station. Jamie wanted to see if they would follow an instruction announced loudly over a speaker that said, "passengers must not run on the platform when the train arrives".

Jamie counted how many males and females did or did not run when the arrival of their train was announced.

Jamie used a chi-squared test to find out if the results were significant.

(a) Calculate the chi-squared for the data gathered by Jamie by completing **Table 1**.

The formulae and statistical tables can be found at the front of the paper.

Your answers should **all** be correct to **two** decimal places.

(4)

	Observed	Expected	O-E	(O-E) <sup>2</sup>	(O-E) <sup>2</sup> /E
Ran on the platform	41	38.03			
Did not run on the platform	21	23.97			
Ran on the platform	51	53.97			
Did not run on the platform	37	34.03			
	platform  Did not run on the platform  Ran on the platform  Did not run on	Ran on the platform 41  Did not run on the platform 21  Ran on the platform 51  Did not run on 37	Ran on the platform  Did not run on the platform  21 23.97  Ran on the platform  51 53.97  Did not run on 37 34.03	Ran on the platform  Did not run on the platform  21 23.97  Ran on the platform  51 53.97  Did not run on 37 34.03	Ran on the platform  Did not run on the platform  21 23.97  Ran on the platform  51 53.97  Did not run on 37 34.03

Chi-squared =

Table 1

**Space for calculations** 



(Total for Question 7 = 6	marks)
	(1)
(c) Give <b>one</b> conclusion that Jamie could make from the data gathered from his investigation.	(4)
	(1)
The formulae and statistical tables can be found at the front of the paper.	(4)
(b) State, using the data, whether Jamie's results are significant for a two-tailed test $P \le 0.025$ where $df = 1$ .	st at

8	Ling is investigating the impact of parenting styles on infant attachment. She has gathered nine peer-reviewed, published articles. The articles include in-depth, qualitative data from parents about their parenting styles and infant behaviours.	
	(a) Describe how Ling could use thematic analysis to analyse the qualitative data in the articles.	(2)
	(b) Explain <b>one</b> improvement that Ling could make to her investigation.	(2)
	(Total for Question 8 = 4 ma	rks)

9	Poppy is designing a laboratory experiment to test conformity to a majority group. She intends to replicate the procedure used by Asch (1951) for his research into conformity using lines. Poppy will increase the number of participants to three per experiment and the number of confederates to 10. Poppy has a total of nine participants, so plans to replicate her experiment three times.
	Each experiment consists of 20 trials where the three participants have to state their answer for each slide. There are 20 different slides, each with three possible answers. In all trials, the 10 confederates will give the same, previously agreed, incorrect response.
	Explain <b>three</b> control issues that Poppy would need to plan for when designing her laboratory experiment.
1	
2	
2	
3	
	(Total for Question 9 = 6 marks)
=	
	TOTAL FOR SECTION C = 20 MARKS



#### **SECTION D**

### Answer the question. Write your answer in the space provided.

**10** One key question for society is the implication for treating offenders if aggression is found to be a result of innate biological factors rather than choice.

Legal systems are often based on the idea that individuals have free will, so have acted out of choice, so we should punish them for their actions. Some biological theories suggest that aggression is innately determined, and actions may not be a choice, so treatments may be more appropriate for offenders.

In 1966 Charles Whitman randomly fired gun shots at people, killing a total of 16 and wounding 31 others. It was discovered he had a brain tumour that may have affected his amygdala, potentially resulting in an inability to control his emotions and actions.

Dabbs et al. (1995) studied 692 male prisoners and found high levels of testosterone in those who committed violent crimes, which could indicate a link between aggression and increased testosterone levels.

Discuss the key question of the implication for treating offenders if aggression is found to be a result of innate biological factors rather than choice. You should use concepts, theories and/or research studied in your psychology course.

You must make reference to the context in your answer.	(8)



(Total for Question 10 = 8 marks)

**TOTAL FOR SECTION D = 8 MARKS** 

# BLANK PAGE QUESTION 11 BEGINS ON THE NEXT PAGE.

### **SECTION E**

# Answer the question. Write your answer in the space provided.

<b>11</b> Assess how far psychological research can be considered ethical.	(20)





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(Total for Question 11 = 20 marks)
TOTAL FOR SECTION F - 20 MARKS

**TOTAL FOR PAPER = 96 MARKS** 

