GradeMax

Write your name here

Surname	Other names

Pearson Edexcel
International Advanced Level

Centre Number | | | | | |

Candidate Number | | | | |

Psychology

International Advanced Level
Paper 4: Clinical Psychology and Psychological Skills

Monday 22 January 2018 – Morning
Time: 2 hours

Paper Reference
WPS04/01

You do not need any other materials.

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.
- Check your answers if you have time at the end.

Turn over ▶

P54970RA

©2018 Pearson Education Ltd.

1/1/1/1/1/1

P 5 4 9 7 0 R A 0 1 3 2

Pearson

FORMULAE AND STATISTICAL TABLES

Standard deviation (sample estimate)

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

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**	**0.0025**
	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.

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

Chi-squared distribution formula

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

Critical values for chi-squared distribution

	Level of significance for a one-tailed 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

	Level of significance for a one-tailed test		
	0.05	0.025	0.01
	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.

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

SECTION A

CLINICAL PSYCHOLOGY

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

1 In your studies of schizophrenia you will have learned about the contemporary study by Suzuki et al. (2014).

(a) Explain **two** strengths of Suzuki et al.'s (2014) study.

(4)

1 .....

.....

.....

.....

.....

.....

2 .....

.....

.....

.....

.....

.....

.....

(b) Explain **one** weakness of Suzuki et al.'s (2014) study.

(2)

.....

.....

.....

.....

.....

.....

.....

(Total for Question 1 = 6 marks)

2 Rosenhan and Seligman (1989) suggest that abnormality is a failure to function adequately. They give characteristics that can be used to determine abnormal behaviour.

(a) Explain **one** weakness of using 'failure to function adequately' to determine abnormality.

(2)

(b) John is an 18 year old British exchange student who has coloured his hair green, tattooed his arm and has had several body piercings. He is popular with friends and he is achieving high grades in school.

Justify whether John's behaviour is abnormal, with reference to **one** characteristic from Rosenhan and Seligman's (1989) 'failure to function adequately'.

(2)

(Total for Question 2 = 4 marks)

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

GradeMax

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

BLANK PAGE

3 Researchers investigated schizophrenia in siblings (brothers and sisters). They reviewed the medical histories of 500 pairs of siblings where schizophrenia had been diagnosed within four generations of their family history. The researchers recorded whether schizophrenic symptoms were present in one sibling, both siblings, or in neither sibling.

The data gathered in the study is shown in **Table 1**.

	Schizophrenic symptoms present
One sibling	20%
Both siblings	55%
Neither sibling	25%

Table 1

(a) Calculate the total number of participants in the group where **neither** sibling had schizophrenic symptoms.

(1)

Space for calculations

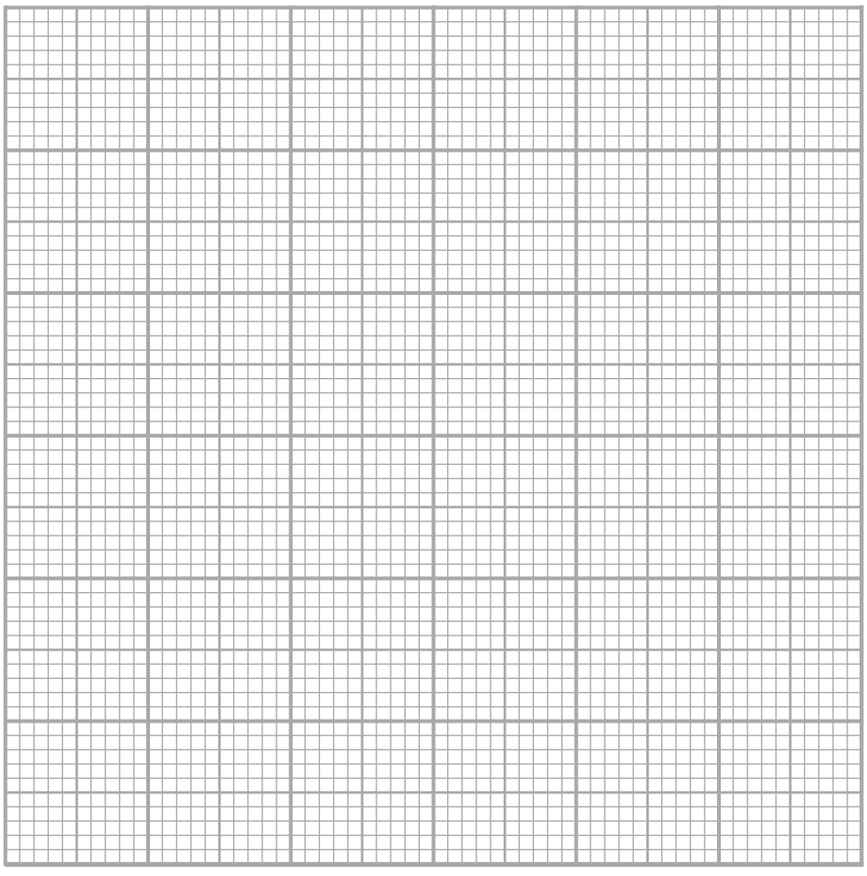
Total number of participants where neither sibling had schizophrenic symptoms .....

DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA

(b) Draw a bar chart to represent the data in **Table 1**.

(3)

Title



(c) State **one** conclusion that the researchers can make from the results in **Table 1**.

(2)

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

(d) The researchers intend to publish their study using the conventions of published psychological research.

State a one-tailed (directional) hypothesis for this study.

(3)

.....

.....

.....

.....

.....

(Total for Question 3 = 9 marks)

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

4 Dr Morgan conducted a study into the benefits of CBT as a therapy for mental health conditions. Participants were asked to rate their mental health after 10 weeks of CBT, and a close family member also rated the participants mental health.

Scores were rated from 1 (no improvement) to 10 (significant improvement).

The results are shown in **Table 2**.

Self-rated mental health	Rank 1	Family-rated mental health	Rank 2	d	d^2
2	1	3	1	0	0
5	3	4	2	1	1
4	2	5	3	-1	1
6	4	7	5	-1	1
8	5	6	4	1	1
9	6	8	6	0	0
				Total:	4

Table 2

Calculate Spearman's rank correlation coefficient for the results of **Table 2**.

You **must** show your calculations by substituting into the formula.

Express your answer to two decimal places.

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

Space for calculations

Spearman's rank correlation coefficient .....

(Total for Question 4 = 2 marks)

5 In your studies of clinical psychology you will have learned about either unipolar depression or anorexia nervosa.

Explain **one** strength and **one** weakness of a biological explanation of **either** unipolar depression **or** anorexia nervosa.

Mental health disorder

.....

Strength

.....

.....

.....

.....

.....

.....

Weakness

.....

.....

.....

.....

.....

.....

(Total for Question 5 = 4 marks)

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

6 In your studies of clinical psychology you will have conducted a practical investigation.

(a) State **one** aim of your practical investigation.

(1)

(b) Describe the results of your practical investigation.

(4)

(c) Explain **one** strength of the methodology used in your practical investigation.

(2)

.....

.....

.....

.....

.....

(Total for Question 6 = 7 marks)

TOTAL FOR SECTION A = 32 MARKS

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

GradeMax

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

SECTION B

CLINICAL PSYCHOLOGY

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

7 Evaluate the effectiveness of drug and family therapies in the treatment of schizophrenia.

(16)

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

GradeMax

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

(Total for Question 7 = 16 marks)

TOTAL FOR SECTION B = 16 MARKS

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

SECTION C

PSYCHOLOGICAL SKILLS

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

8 Case studies of brain damaged patients such as HM, provide cognitive psychologists with valuable research data about human memory functions.

(a) Explain **two** weaknesses of using case studies of brain damaged patients to investigate human memory.

(4)

1 .....

.....

.....

.....

.....

2 .....

.....

.....

.....

.....

(b) Justify the use of brain scanning/neuroimaging as a way to increase the credibility of case studies of brain damaged patients.

(2)

.....

.....

.....

.....

.....

(c) Describe **one** difference between PET brain scanning and fMRI brain imaging.

(2)

(d) Caleb is interested in human memory. He has decided to investigate rehearsal in the short-term memory store. Caleb decides to use a laboratory experimental method for his investigation.

Describe how Caleb could use a laboratory experimental method to test rehearsal.

(2)

(Total for Question 8 = 10 marks)

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

GradeMax

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

9 In psychology, researchers will consider a range of methods and select the most appropriate for their study.

One possible method for psychological research is using observations.

(a) Define what is meant by participant observation.

(1)

(b) Define what is meant by structured observation.

(1)

GradeMax

(c) Researchers in psychology may investigate socially sensitive topics such as prejudice, aggression, childhood trauma or mental health.

Analyse the use of covert observations when investigating socially sensitive topics in psychology.

(4)

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

A naturalistic observation was used to investigate the play preferences of children who were two years old. The data was gathered using event sampling.

The researchers recorded each time a child was observed displaying each play preference over a 60-minute period.

The data is displayed in **Table 3**.

	Number of times child was observed displaying each play preference over a 60-minute period			
	Plays alone	**Plays with one other**	**Plays in a group**	**Seeks adult attention**
Child A	//	𝍸	/	𝍸 /
Child B	///	𝍸 /	//	𝍸 /
Child C	𝍸 𝍸	///	//	////
Child D	𝍸	///	//	𝍸 ///
Child E	//	𝍸	////	𝍸
Child F	/	///	𝍸	//

Table 3

(d) State the level of measurement for this data.

(1)

.....

(e) The range can be used as a measure of dispersion.

(i) Calculate the range for the data in the category of 'plays alone'.

(1)

Space for calculations

The range for the category of 'plays alone' .....

(ii) Describe **one** reason why the range is not a useful measure of dispersion for the data in the category of 'plays alone'.

(2)

.....

.....

.....

.....

.....

.....

(Total for Question 9 = 10 marks)

TOTAL FOR SECTION C = 20 MARKS

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

GradeMax

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

SECTION D

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

10 One key question for society is whether memory can be manipulated to create false memories of events.

Cognitive psychologists Loftus and Pickrell (1995) investigated whether participants aged 18 years to 53 years could be led to believe they were lost in a shopping mall as a child. Relatives of the participants provided three true stories about the participants' childhood and the researchers added a false story about getting lost.

The participants were sent a booklet with the stories to read which included blank spaces for the participants to record their own memories of the stories. 68% of the true stories were recalled by participants and 25% of the false stories about getting lost were recalled. Bartlett (1932) would claim this is evidence of reconstructive memory.

Discuss the key question of whether memory can be manipulated to create false memories of events. You should use concepts, theories and/or research studied in your psychology course.

You must make reference to the context in your answer.

(8)

GradeMax

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

(Total for Question 10 = 8 marks)

TOTAL FOR SECTION D = 8 MARKS

SECTION E

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

11 Assess the claim that psychology is a science.

(20)

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

GradeMax

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

GradeMax

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

(Total for Question 11 = 20 marks)

TOTAL FOR SECTION E = 20 MARKS
TOTAL FOR PAPER = 96 MARKS

GradeMax

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

BLANK PAGE