Vrite your name here Surname		Other names	;
Pearson Edexcel nternational Advanced Level	Centre Number		Candidate Number
<b>Psycholog</b>	41/		
International Advar Paper 1: Social and	nced Subsic		logy
International Advar	nced Subsic Cognitive F		logy Paper Reference WPS01/01

#### **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 64.
- 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 ▶





#### **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
		vel of signifi	cance for a	two-tailed t	est
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

Leve	l of	significance f	for a	one-tailed test
------	------	----------------	-------	-----------------

	0.10	0.05	0.025	0.01	0.005	0.0005
		Level of s	ignificance	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 s	signifi	cance	for a	one-	tailed	test
-------	------	---------	-------	-------	------	--------	------

	0.05	0.025	0.01
	Level of signif	icance 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.



# BLANK PAGE

SECTION A BEGINS ON THE NEXT PAGE.



## **SECTION A**

## **SOCIAL PSYCHOLOGY**

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

1	In social psychology you will have learned about one classic study in detail.	
	(a) Describe the procedure used in Moscovici et al.'s (1969) study.	
		(4)
•••••		
		•••••

(b) Explain <b>one</b> strength and <b>one</b> weakness of Moscovici	et al.'s (1969) study.	(4)
Strength		
Weakness		
	Total for Question 1 = 8 ma	rks)

- 2 Michelle carried out a questionnaire to find out what factors people thought affected obedience. She conducted a thematic analysis on the qualitative data from her questionnaire and found the two most common themes were:
  - presence of an authority figure
  - proximity of an authority figure.

The median score for the two themes is shown in **Table 1**.

	Presence of an authority figure	Proximity of an authority figure
Median	15	10

Table 1

Tit	tle																																									(3	)	
111	lie																																											
																				,	,																							
														_						_	$\blacksquare$	П				_																		
			$\pm$		$\blacksquare$		$\pm$	Н						Ŧ						$\exists$	$\pm$																							H
	#		$\pm$	H	#	#	#	$\sharp$						#	Н	+			H	$\sharp$	#	Ħ	$\perp$	+	H		Н	H	$\pm$		Н	$\pm$		H	$\perp$		Ħ	$\pm$	H	$\parallel$	#	Ħ	Ħ	H
	#		$\pm$	H	#	$\pm$	#	$\pm$						#						$\pm$	#	$\parallel$		+	H				$\pm$			$\pm$			$\parallel$		Ħ	$\pm$	H		$\pm$	Ħ	$\parallel$	Ė
	#		$\pm$	Ш	#	$\pm$	#	$\pm$						#		+			Ħ	$\pm$	İ	Ħ		#		#											Ħ	$\pm$	Ħ		I	Ħ	$\parallel$	
	#		$\pm$	Ш		$\pm$	#	$\pm$	$\pm$		Ħ			+	Ħ	t	Ħ		Ħ	$\exists$	$\pm$	Ħ		$^{+}$	Ħ	$^{+}$	Ħ	Ħ	$\pm$	$\pm$	Ħ	$\pm$		Ħ	Ħ		Ħ	$\pm$	Ħ	Ħ	$\pm$	$\pm$	Ħ	
			$\pm$	Ш		$\pm$	$\pm$	$\pm$						+					$\pm$	$\pm$	$\pm$	$\pm$	$\pm$	$\pm$	Н	$\pm$	Н		$\pm$		Н	Н			$\pm$			$\pm$	H	$\exists$	$\pm$		$\exists$	E
+++	+	+	+	Н	+	+	+	+	+	+	Н	++	+	+	Н	+	Н	+	H	+	+	$\forall$	+	+	Н	+	Н	++	Н	+	Н	Н	+	+	Н	$\vdash$	$\forall$	+	Н	+	+	$\vdash$	$\forall$	H
	$\blacksquare$		$\blacksquare$	H	$\blacksquare$	$\blacksquare$	$\mp$	$\blacksquare$	$\blacksquare$		Н	$\blacksquare$	$\blacksquare$	Ŧ	Н	+	Н	$\blacksquare$	F	$\blacksquare$	Ŧ	H	$\blacksquare$	$\mp$	Н	+	Н	$\blacksquare$	$\blacksquare$	+	Н	$\blacksquare$	$\blacksquare$	$\blacksquare$	$\blacksquare$		H	$\blacksquare$	H	$\blacksquare$	Ŧ	H	H	F
	$\blacksquare$		$\blacksquare$	П	-	$\mp$	#	$\Box$	$\perp$		Н	$\blacksquare$		1	Н	+	Н		Ħ	$\Box$	$\pm$	H	$\blacksquare$	+	H	+	Н		$\blacksquare$		H	$\blacksquare$		H	$\blacksquare$		H	$\blacksquare$	H	$\Box$	Ŧ	H	H	F
	#		ш	ш	#	#	#	#			Ц	ш		#	Н	ļ	Ц			#	#	$\equiv$	П	#	П	#	ш	ш			П	Щ		ш	ш		ш	#	H	$\perp$	#	#	$\Box$	
	$\pm$		$\pm$	Ш		$\pm$	#	$\pm$						1		$\pm$			H	$\pm$	$\pm$	$\pm$		$\pm$	H	$\pm$			Н		Н	Н		Н	$\pm$			$\pm$	H	$\pm$	$\pm$		$\pm$	
+++	+	+	+	H	+	+	+	+	+	+	H	+	+	+	H	+	Н	+	+	+	+	H	$\mathbb{H}$	+	$\forall$	+	Н	+	$\mathbb{H}$	+	$\forall$	+	+	+	$\mathbb{H}$	H	$\forall$	+	H	+	+	+	H	H
	+		$\blacksquare$	$\blacksquare$	#	#	#	$\blacksquare$	+		H			+		+	H	H	$\perp$	$\exists$	+	H	H	+	H	+	H		H	$\perp$		$\blacksquare$		H	H		H	$\blacksquare$	H	$\blacksquare$	$\pm$	$\Box$	H	F
	$\pm$		$\pm$	Ш	$\pm$	$\pm$	$\pm$	$\pm$	$\pm$		Н	$\parallel$		1		#	Н	$\pm$	$\pm$	$\pm$	$\pm$	$\pm$	$\parallel$	#	Ħ	#		$\Box$	$\pm$		$\parallel$	$\parallel$		$\parallel$	$\pm$		Ħ	$\pm$	Ħ	$\pm$	#	$\perp$	$\parallel$	
+++	+		+	Н	+	+	+	+	+		Н	+	$\perp$	$\pm$	H	$\pm$	Н	+	+	+	$\pm$	$\forall$	+	+	Н	$\pm$	Н	+	+	+	$\forall$	+	$\perp$	$\mathbb{H}$	+	$\perp$	$\forall$	+	Н	+	+	+	$\forall$	H
	#		+	$\blacksquare$	#	#	#	$\blacksquare$	+	+	H	-	H	+	H	+	H	H	+	井	+	H	H	$\mp$	H	+	H		H	+	H	H	+	H	H	$\perp$	H	Ŧ	H	$\blacksquare$	+	H	H	F
		-	-	$\rightarrow$	++	+	++	+	+		+	+	+	-	+	+	Н	+	$\vdash$	+	+	+	+	+	$\forall$	+	Н	+	+	+	+	+	+	+	+	$\vdash$	+	+	-	+	-	+	+	
			+	$\Box$	+	+	+	-	_	_		-	+	_	-	-	-	-	$\vdash$	$\rightarrow$	_	+	_	_	-	_		+	-		-	-	-	+	+	$\vdash$	+	+	-	+	`-	-	+	⊢



(b) Explain <b>one</b> strength of the median as a measure of central tendency.	(2)
c) Explain <b>one</b> strength and <b>one</b> weakness of gathering qualitative data in Michelle's research.	(4)
Strength	(-/
Weakness	
Weakiress	

Michelle also gathered quantitative data from her questi	onnaire
(d) Define what is meant by 'quantitative data'.	(4)
	(1)
	Total for Question 2 = 10 marks)

3	Evaluate agency theory as an explanation of obedience.	(8)



<b>XX</b> (	
<b>※</b>	
<b>XX</b>	
XX	
$\otimes$	
**	
**	
*	
$\sim$	
$\otimes$	
X	
X	
$\times$	
$\otimes$ 1	
$\times$	
X\$	
$\otimes$	
$\langle \rangle$	
$\langle \rangle$	
$\otimes$ $\mathbb{I}$	
$\gg$ 1	
% I	
<b>///  </b>	
$\times$	
<b>*</b>	
<b>*</b>	
***	
<b>XX</b>	
<b>XX</b>	
<b>※</b>	
XX	
<b>※</b>	
<b>※ I</b>	
<b>XX</b>	
<b>※</b>	
<b>※ I</b>	
XX	
	(Total for Ouestion 3 = 8 marks)
	(Total for Question 3 = 8 marks)
	(Total for Question 3 = 8 marks)
	(Total for Question 3 = 8 marks)  TOTAL FOR SECTION A = 26 MARKS

# **SECTION B**

## **COGNITIVE PSYCHOLOGY**

	Answer ALL questions in this section. Write your answers in the spaces pro	ovided.
4	As part of your studies in cognitive psychology, you will have conducted a practical investigation.	
	(a) State the dependent variable from your cognitive practical investigation.	(1)
	(b) Describe the results from your cognitive practical investigation.	
		(3)
	(c) Describe <b>one</b> control you implemented to make your procedure reliable.	(2)
	(Total for Question 4 = 6	marks)



5	In cognitive psychology, you will have learned about the following contemporary study in detail:	
	<ul> <li>Schmolck et al. (2002) Semantic knowledge in patient HM and other patients with bilateral medial and lateral temporal lobe lesions.</li> </ul>	
	(a) State <b>one</b> result of Schmolck et al.'s (2002) study.	(1)
	(b) Explain <b>one</b> strength and <b>one</b> weakness of Schmolck et al.'s (2002) study.	(4)
	Strength	
	Weekness	
	Weakness	
	(Total for Question 5 = 5 ma	rks)



6	Horatio investigated the influence of age on memory recall. Participants were grouped by age and asked to read a poem three times and then write it down. The poem consisted of 30 words.
	Horatio scored the accuracy of recall of the poem out of 30, with 30 representing all

words recalled accurately and 0 representing no words recalled accurately.

Condition A participants were aged 20 to 25 years

(a) State a non-directional (two-tailed) null hypothesis for this investigation.  (2)  Horatio's participants had volunteered for his investigation by responding to an advertisement.  (b) Explain one weakness of the sampling technique Horatio used in his investigation.  (2)  Horatio collected nominal data.  (c) Define what is meant by the term 'nominal data.'  (1)	<ul> <li>Condition B participants were aged 60 to 65 years.</li> </ul>	
advertisement.  (b) Explain one weakness of the sampling technique Horatio used in his investigation.  (2)  Horatio collected nominal data.  (c) Define what is meant by the term 'nominal data.'	(a) State a non-directional (two-tailed) null hypothesis for this investigation.	(2)
advertisement.  (b) Explain one weakness of the sampling technique Horatio used in his investigation.  (2)  Horatio collected nominal data.  (c) Define what is meant by the term 'nominal data.'		
advertisement.  (b) Explain one weakness of the sampling technique Horatio used in his investigation.  (2)  Horatio collected nominal data.  (c) Define what is meant by the term 'nominal data.'		
advertisement.  (b) Explain one weakness of the sampling technique Horatio used in his investigation.  (2)  Horatio collected nominal data.  (c) Define what is meant by the term 'nominal data.'		
advertisement.  (b) Explain one weakness of the sampling technique Horatio used in his investigation.  (2)  Horatio collected nominal data.  (c) Define what is meant by the term 'nominal data.'		
Horatio collected nominal data.  (c) Define what is meant by the term 'nominal data.'		
(c) Define what is meant by the term 'nominal data.'	(b) Explain <b>one</b> weakness of the sampling technique Horatio used in his investigation	
(c) Define what is meant by the term 'nominal data.'		
(c) Define what is meant by the term 'nominal data.'		
(c) Define what is meant by the term 'nominal data.'		
(c) Define what is meant by the term 'nominal data.'		
(c) Define what is meant by the term 'nominal data.'		
		(1)



The scores for accuracy of recall out of 30 in both conditions are recorded in **Table 2**.

Condition A Participants aged 20 to 25 years	<b>Condition B</b> Participants aged 60 to 65 years
23	19
21	23
26	26
25	24
23	27
20	22
22	24
Mean score: 22.86	Mean score: 23.57

Table 2

(d) Calculate the mode score for **Condition B** using the data in **Table 2**.

(1)

# **Space for calculations**

Mode Score for Condition B	
(e) State <b>one</b> conclusion that Horatio could make from the results in <b>Table 2</b> .	(1)
	(-7

(Total for Question 6 = 7 marks)



7	Evaluate Bartlett's (1932) theory of reconstructive memory, including schema theory.	(8)

<b>***</b> 1	
<b>&gt;&gt;&gt;  </b>	
<b>XX</b>	
<b>XX</b>	
<b>3</b> XX	
<del>-</del>	
<b>*</b>	
<b>3</b> ×	
<b>3</b> X	
58	
<b>3</b> \$	
$\gg$	
$\otimes$	
$\otimes$ I	
$\times$	
$\times$	
$\gg$	
$\otimes$	
(X)	
<b>※ I</b>	
288	
<b>***</b>	
<b>XX</b>	
<b>***</b>	
<b>XX </b>	
<b>※ I</b>	
<b>&gt;&gt;&gt; </b>	
$\times$	
- XX	
ANTERIN TELES ANTER	
WOLWAND SAME	
ONO! WALLETING ANEA	
CO NOT WALLE IN 1713 AREA	(Total for Question 7 = 8 marks)
CO NOT WATER IN 1713 ANEA	(Total for Question 7 = 8 marks)
DO NOT WATER IN THIS AREA	
DO NOT WALLE IN THIS AREA	
CONOL WALLE IN THIS AREA	(Total for Question 7 = 8 marks)  TOTAL FOR SECTION B = 26 MARKS
DO NOT WALLE IN THIS AREA	



#### **SECTION C**

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

8 Damon and Elisa's psychology lecturer is teaching his class about the importance of good research design when planning an investigation. He suggests that in their planning they need to consider field experiments and laboratory experiments. The lecturer gives them a scenario from which they need to plan an investigation.

#### **Scenario**

Design and carry out an investigation to measure the short-term memory capacity of local 12-year old children.

The children will need to learn five number lists. The first list contains six digits and each following list increases by two digits, up to the final list of 14 digits. The children will be asked to recall the numbers from each list in the correct order.

Damon decides to carry out a field experiment with children from a local school. Elisa decides to carry out a laboratory experiment, bringing children to one of the research rooms at the university.

Evaluate whether Damon's choice of a field experiment was a more appropriate method than Elisa's choice of a laboratory experiment for this research scenario.

You must make reference to the context in your answer.	
	(12)

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA






(Total for Question 8 = 12 marks)
(
TOTAL FOR SECTION C = 12 MARKS
TOTAL FOR PAPER = 64 MARKS

# **BLANK PAGE**

