Surname	Other n	ames
Pearson Edexcel International Advanced Level	Centre Number	Candidate Number
Psycholog International Advar		_
	•	′
Paper 1: Social and Sample assessment materia September 2015 Time: 1 hour 30 minutes	Cognitive Psyc	·

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 critical value 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 ▶

PEARSON

S49527A ©2015 Pearson Education Ltd.



FORMULAE AND CRITICAL VALUE 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

	Level of significance for a one-tailed test				est
	0.05	0.025	0.01	0.005	0.0025
	Le	vel of signifi	icance 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

Level of	significance f	for a one-tailed test
----------	----------------	-----------------------

	0.10	0.05	0.025	0.01	0.005	0.0005
	Le	vel of sig	nificance	for a two	-tailed te	est
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	F1 O1	FF 76	EO 24	(2.60	72.40
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 70	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 sig	nificance 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

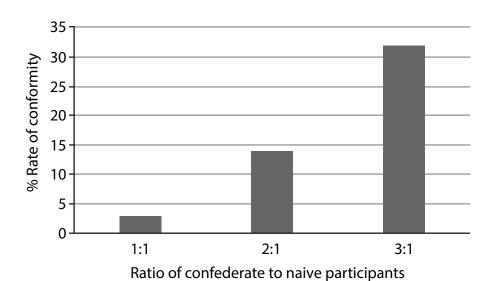
		Answer ALL questions. Write your answers in the spaces provided.	
1	(a)	Chetna wanted to investigate levels of conformity in her local library. She staged a study where confederates were either silent (condition one) or noisy (condition two). For each condition she recorded how many of the other library users made a noise. She interviewed each library user after each condition, and asked them how they felt about the noise in the library, and about their own noise levels. The interviews were conducted one day apart.	
		Explain one ethical issue that Chetna would need to consider before she recruited participants for her investigation.	
			(2)
	(b)	Chetna chose to gather both qualitative and quantitative data for her investigation into levels of conformity.	
		Define the term 'qualitative data'.	(1)
			(1)
	(c)	State two ways in which Chetna gathered qualitative data to investigate non-conformity in her study.	(2)
1			
2			

Table 1 is a tally chart showing	g conformity in silent and	I noisy conditions.
Table 1 is a tally chart showing	g conformity in silent and Condition one	I noisy conditions. Condition two
Table 1 is a tally chart showing Conforming behaviour		
,	Condition one	Condition two
Conforming behaviour	Condition one	Condition two
Conforming behaviour	Condition one #####	Condition two Htt Htt Htt I

2 (a) Describe the procedure used in Asch's (1951) original conformity study from when the participants entered the laboratory.

(3)

(b) **Graph 1** shows the percentage of conformity in Asch's variation study.



Graph 1

Describe how the ratios shown in **Graph 1**, from one of Asch's variation studies (1952, 1956) can be used to explain conformity.

//	9	٦
	-5	-1
١.	J	J

(c)	Explain whether Asch's original procedure can be considered a valid measure of conformity.	(3)
	(Total for Question 2 = 9 ma	rks)

3	Assess the credibility of Milgram's research following the findings of Burger's (2009) replication study of obedience.
	(Total for Question 3 = 8 marks)
_	
	TOTAL FOR SECTION A = 26 MARKS

SECTION B

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

4 Mr Evans conducted an experiment to test the multi-store model of memory. He gave his class two lists of words to remember; 'list one' on Monday and 'list two' on Friday. He presented each list one word at a time for one second on a whiteboard.

Below are the lists of words shown to the class.

List one
Frog
Dog
Log
Hog
Blog
Fog

List two
Big
Large
Huge
Great
Vast
Giant

(a) Mr Evans used immediate recall and delayed recall.

Explain tl	he purpose	of using	immediate	and de	layed re	call as a	way of	testing	the
multi-sto	re model of	f memory	/.						

• • • • • • • • • • • • • • • • • • • •	 	 	 	 	• • • • • • • • • • • • • • • • • • • •	 • • • • • • • • • • • • • • • • • • • •	 • • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	 • • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	 •••••	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	 	 	 	 	 	•••••	

(2)

(b) **Table 2** shows the results of Mr. Evans's memory test.

	List	one	List	two
	Immediate recall	Delayed recall	Immediate recall	Delayed recall
Participant A	2	5	5	2
Participant B	3	4	6	3
Participant C	4	5	4	2
Participant D	2	3	5	4
Participant E	3	4	6	2
Participant F	4	6	6	2
Participant G	1	3	4	3
Participant H	2	4	5	2
Participant I	3	4	5	5
Participant J	3	5	6	2

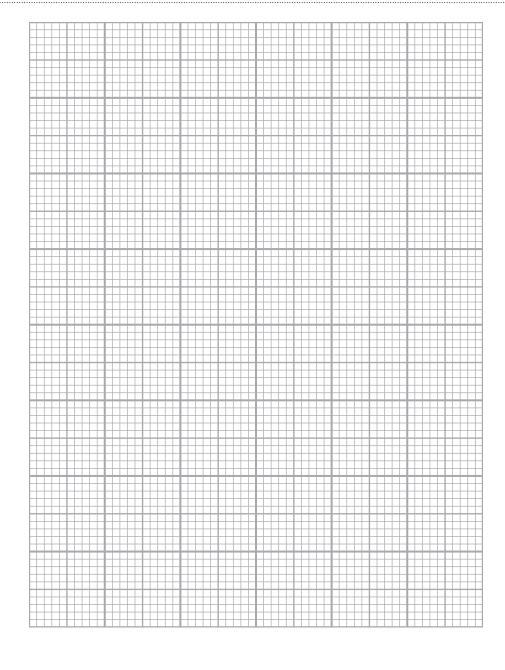
Table 2

Using the data in **Table 2**, draw a histogram to illustrate the frequency of the immediate recall of words in list one.

You should title and label your histogram appropriately.

(3)

Title



(c)	Calculate the average immediate recall of list two, using an appropriate measure of central tendency.	(1)
(d)	A Wilcoxon Signed Ranks test was used to calculate statistical significance for delayed recall. The calculated (T) value was 4 (T=4) for a one-tailed test at p<0.05 with N=9.	
	Determine whether this result is significant or not.	
	The critical value table can be found in the formulae and statistics table at the front of the paper.	
		(1)
(e)	Explain the findings of Mr. Evans's study, using your knowledge of encoding in short-term memory and long-term memory described by the multi-store	
	model of memory.	(2)
	(Total for Question 4 = 9 ma	ırks)

BLANK PAGE QUESTION 5 BEGINS ON THE NEXT PAGE.

5 (a)	A criticism of laboratory experiments is that they lack ecological validity. Give one reason for this.	(1)
(b)	Explain why laboratory experiments may be seen as one of the most reliable research methods to use to investigate memory.	(4)
	(Total for Question 5 = 5	marks)

6	(a)	During your course, you will have conducted a practical investigation into cognitive psychology using laboratory experiments. Describe how you operationalised the variables in your investigation.	(2)
	(b)	Explain one way that you could have changed the procedure of your experiments to improve the validity of your practical investigation.	(2)
		(Total for Question 6 = 4 ma	rks)

- 1	XXXXXX
- 1	*****

- 1	
- 1	

- 1	
- 1	
- 1	\times
- 1	
- 1	
- 1	
- 1	*****
- 1	*****
- 1	(XXXXX)
- 1	
- 1	****
- 1	
- 1	
- 1	
- 1	$\times\!\!\times\!\!\times\!\!\times\!\!\times$
- 1	
- 1	
- 1	
- 1	
- 1	
- 1	
- 1	
- 1	
- 1	
- 1	\times
- 1	\times
- 1	
	2
	\times

	- CO 200 CO
	XX
- 1	
- 1	\times
- 1	
- 1	
- 1	
- 1	
- 1	
- 1	
- 1	
- 1	
- 1	\times
- 1	XXXXXX
- 1	***
- 1	
- 1	
- 1	\times iii \times
- 1	
н	
1	
	l Old
	NOD
	NOW
	DONO
	TOWOOL
	TONOT
	Y TON OC
	MIONOG
	L DO NOT WA
	L DONOT WRI
	L DO NOT WRIT
	L DO NOT WRIT
	L DO NOT WRITE
	L DO NOT WRITE!
	L DO NOT WRITE II
	L DO NOT WRITE II
	L DO NOT WRITE IN
	L DO NOT WRITE IN
	L DO NOT WRITE IN TH
	L DO NOT WRITE IN THI
	L DO NOT WRITE IN THI
	L DO NOT WRITE IN THIS
	L DO NOT WRITE IN THIS A
	L DO NOT WRITE IN THIS A
	L DO NOT WRITE IN THIS AR
	L DO NOT WRITE IN THIS ARE
	L DO NOT WRITE IN THIS ARE
	L DO NOT WRITE IN THIS ARE
	L DO NOT WRITE IN THIS AREA
	L DO NOT WRITE IN THIS AREA
	L DO NOT WRITE IN THIS AREA
	L DO NOT WRITE IN THIS AREA
	L DO NOT WRITE IN THIS AREA
	L DO NOT WRITE IN THIS AREA

7	Evaluate the significance of reconstructive memory as a theory of everyday memory, using your knowledge of Bartlett's (1932) War of the Ghosts study.	(0)
		(8)

SECTION C

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

8 Mr Meek, the geography teacher at a school, wanted to start a recycling programme. This would involve all staff and students separating their waste and using the correct recycling bins, and the removal of mixed waste in bins where all waste is placed in the same one irrespective of whether the rubbish can be recycled.

Many staff and students argued that this would take too much of their time and believed that the school would not be able to cope with a strict recycling policy. The head teacher endorsed the policy, and within a few months the recycling programme was working.

Evaluate research into social influence as a way of explaining the success of Mr Meek's recycling programme.

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

(Total for Question 8 = 12 marks)

TOTAL FOR SECTION C = 12 MARKS
TOTAL FOR PAPER = 64 MARKS