Please check the examination details below before entering your candidate information

Candidate surname	Other names

Centre Number | Candidate Number

Pearson Edexcel Level 3 GCE

Time 2 hours

Paper reference **9PS0/03**

Psychology

Advanced

PAPER 3: Psychological Skills

Calculators may be used.

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 80.
- 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

©2022 Pearson Education Ltd.
Q:1/1/1/1/1/1/1/

P 7 0 8 0 0 A 0 1 3 6

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

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.

Mann-Whitney U test formulae

$$U_a = n_a n_b + \frac{n_a(n_a+1)}{2} - \sum R_a$$

$$U_b = n_a n_b + \frac{n_b(n_b+1)}{2} - \sum R_b$$

(U is the smaller of U_a and U_b)

Critical values for the Mann-Whitney U test

	N_b															
N_a	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
***p* ≤ 0.05 (one-tailed), *p* ≤ 0.10 (two-tailed)**																
5	4	5	6	8	9	11	12	13	15	16	18	19	20	22	23	25
6	5	7	8	10	12	14	16	17	19	21	23	25	26	28	30	32
7	6	8	11	13	15	17	19	21	24	26	28	30	33	35	37	39
8	8	10	13	15	18	20	23	26	28	31	33	36	39	41	44	47
9	9	12	15	18	21	24	27	30	33	36	39	42	45	48	51	54
10	11	14	17	20	24	27	31	34	37	41	44	48	51	55	58	62
11	12	16	19	23	27	31	34	38	42	46	50	54	57	61	65	69
12	13	17	21	26	30	34	38	42	47	51	55	60	64	68	72	77
13	15	19	24	28	33	37	42	47	51	56	61	65	70	75	80	84
14	16	21	26	31	36	41	46	51	56	61	66	71	77	82	87	92
15	18	23	28	33	39	44	50	55	61	66	72	77	83	88	94	100
16	19	25	30	36	42	48	54	60	65	71	77	83	89	95	101	107
17	20	26	33	39	45	51	57	64	70	77	83	89	96	102	109	115
18	22	28	35	41	48	55	61	68	75	82	88	95	102	109	116	123
19	23	30	37	44	51	58	65	72	80	87	94	101	109	116	123	130
20	25	32	39	47	54	62	69	77	84	92	100	107	115	123	130	138

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

N_a \ N_b	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
$p \leq 0.01$ (one-tailed), $p \leq 0.02$ (two-tailed)																
5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
6	2	3	4	6	7	8	9	11	12	13	15	16	18	19	20	22
7	3	4	6	7	9	11	12	14	16	17	19	21	23	24	26	28
8	4	6	7	9	11	13	15	17	20	22	24	26	28	30	32	34
9	5	7	9	11	14	16	18	21	23	26	28	31	33	36	38	40
10	6	8	11	13	16	19	22	24	27	30	33	36	38	41	44	47
11	7	9	12	15	18	22	25	28	31	34	37	41	44	47	50	53
12	8	11	14	17	21	24	28	31	35	38	42	46	49	53	56	60
13	9	12	16	20	23	27	31	35	39	43	47	51	55	59	63	67
14	10	13	17	22	26	30	34	38	43	47	51	56	60	65	69	73
15	11	15	19	24	28	33	37	42	47	51	56	61	66	70	75	80
16	12	16	21	26	31	36	41	46	51	56	61	66	71	76	82	87
17	13	18	23	28	33	38	44	49	55	60	66	71	77	82	88	93
18	14	19	24	30	36	41	47	53	59	65	70	76	82	88	94	100
19	15	20	26	32	38	44	50	56	63	69	75	82	88	94	101	107
20	16	22	28	34	40	47	53	60	67	73	80	87	93	100	107	114

N_a \ N_b	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
$p \leq 0.025$ (one-tailed), $p \leq 0.05$ (two-tailed)																
5	2	3	5	6	7	8	9	11	12	13	14	15	17	18	19	20
6	3	5	6	8	10	11	13	14	16	17	19	21	22	24	25	27
7	5	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34
8	6	8	10	13	15	17	19	22	24	26	29	31	34	36	38	41
9	7	10	12	15	17	20	23	26	28	31	34	37	39	42	45	48
10	8	11	14	17	20	23	26	29	33	36	39	42	45	48	52	55
11	9	13	16	19	23	26	30	33	37	40	44	47	51	55	58	62
12	11	14	18	22	26	29	33	37	41	45	49	53	57	61	65	69
13	12	16	20	24	28	33	37	41	45	50	54	59	63	67	72	76
14	13	17	22	26	31	36	40	45	50	55	59	64	67	74	78	83
15	14	19	24	29	34	39	44	49	54	59	64	70	75	80	85	90
16	15	21	26	31	37	42	47	53	59	64	70	75	81	86	92	98
17	17	22	28	34	39	45	51	57	63	67	75	81	87	93	99	105
18	18	24	30	36	42	48	55	61	67	74	80	86	93	99	106	112
19	19	25	32	38	45	52	58	65	72	78	85	92	99	106	113	119
20	20	27	34	41	48	55	62	69	76	83	90	98	105	112	119	127

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

N_a \ N_b	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
$p \leq 0.005$ (one-tailed), $p \leq 0.01$ (two-tailed)																
5	0	1	1	2	3	4	5	6	7	7	8	9	10	11	12	13
6	1	2	3	4	5	6	7	9	10	11	12	13	15	16	17	18
7	1	3	4	6	7	9	10	12	13	15	16	18	19	21	22	24
8	2	4	6	7	9	11	13	15	17	18	20	22	24	26	28	30
9	3	5	7	9	11	13	16	18	20	22	24	27	29	31	33	36
10	4	6	9	11	13	16	18	21	24	26	29	31	34	37	39	42
11	5	7	10	13	16	18	21	24	27	30	33	36	39	42	45	48
12	6	9	12	15	18	21	24	27	31	34	37	41	44	47	51	54
13	7	10	13	17	20	24	27	31	34	38	42	45	49	53	56	60
14	7	11	15	18	22	26	30	34	38	42	46	50	54	58	63	67
15	8	12	16	20	24	29	33	37	42	46	51	55	60	64	69	73
16	9	13	18	22	27	31	36	41	45	50	55	60	65	70	74	79
17	10	15	19	24	29	34	39	44	49	54	60	65	70	75	81	86
18	11	16	21	26	31	37	42	47	53	58	64	70	75	81	87	92
19	12	17	22	28	33	39	45	51	56	63	69	74	81	87	93	99
20	13	18	24	30	36	42	48	54	60	67	73	79	86	92	99	105

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

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.

Answer ALL questions.

SECTION A

Research Methods

1 Junior to senior Pinocchio study

Approximately 1000 participants were recruited by researchers to visit a Science Centre to investigate lying ability and frequency. The researchers used a cross-sectional design for their study. The participants had their ability and frequency of lying measured and their results were then grouped into age categories.

To measure lying ability the participants had to respond to 15 simple questions with a 'yes' or 'no' response. For example, one question was 'can pigs fly?'. Participants were told to either tell the truth or lie depending on the colour of the yes / no response options. The researchers expected the most able liars to respond the quickest and with fewer errors when lying and the least able liars to either have a delayed response or give a reflex truthful response when told to lie.

To measure lying frequency, the participants were asked how many times they had lied in the past 24 hours to family members, friends and strangers in a face-to-face situation.

The age categories and number of participants used for the study are shown in **Table 1**.

Age (years)	Description	Number of participants
6–8	Early childhood	102
9–12	Mid childhood	295
13–17	Adolescence	101
18–29	Young adulthood	83
30–44	Mid adulthood	216
45–59	Older adulthood	134
60–77	Seniors	61

Table 1

(Source: adapted from Debey et al. (2015))

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

(a) Explain **one** strength and **one** weakness of using a cross-sectional design for the junior to senior Pinocchio study.

(4)

Strength

.....

.....

.....

.....

.....

.....

Weakness

.....

.....

.....

.....

.....

.....

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

Table 2 shows the average lying ability of the participants in each of the age categories.

Age (years)	Description	Error rate (%)	Response times (seconds)
6–8	Early childhood	20.20	3.83
9–12	Mid childhood	16.86	3.46
13–17	Adolescence	14.59	3.30
18–29	Young adulthood	8.55	3.25
30–44	Mid adulthood	9.03	3.50
45–59	Older adulthood	10.40	3.60
60–77	Seniors	12.65	3.60

Table 2

(b) Explain **two** conclusions you can make using the data in **Table 2** regarding the lying ability of the participants in the age categories.

(4)

1 .....

.....

.....

.....

.....

.....

2 .....

.....

.....

.....

.....

.....

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

(c) Explain **one** weakness of the junior to senior Pinocchio study in terms of validity.

(2)

.....

.....

.....

.....

.....

.....

(d) Explain **one** strength of the junior to senior Pinocchio study in terms of reliability.

(2)

.....

.....

.....

.....

.....

.....

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

Figure 1 shows the lying frequency of the participants in the junior to senior Pinocchio study.

A histogram to show the frequency distribution of percentage (%) of lies from participants in the past 24 hours

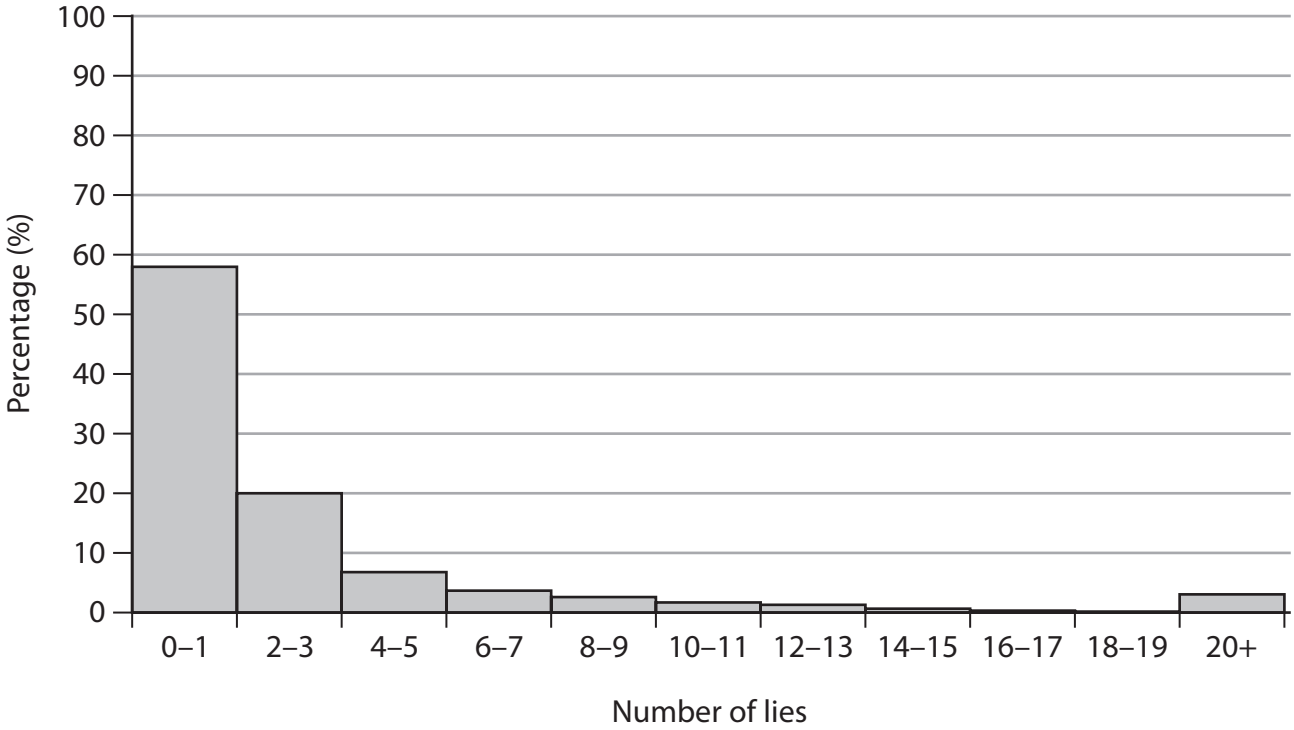

Figure 1

(e) State **one** conclusion that could be made from **Figure 1** with reference to the type of skew shown.

(1)

.....

.....

.....

.....

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

The lying frequency for each age category is shown in **Table 3**.

Age (years)	Description	Mean lying frequency (past 24 hours)
6–8	Early childhood	1.75
9–12	Mid childhood	2.5
13–17	Adolescence	3
18–29	Young adulthood	2.5
30–44	Mid adulthood	2
45–59	Older adulthood	1.75
60–77	Seniors	1.5

Table 3

(f) Calculate the overall mean lying frequency for the participants using the data in **Table 3**. You must give your answer to **one** decimal place.

(1)

SPACE FOR CALCULATIONS

Mean .....

(g) The researchers used a volunteer sampling technique to gather the participants for the junior to senior Pinocchio study.

Explain **one** weakness with using a volunteer sampling technique for the junior to senior Pinocchio study.

(2)

.....

.....

.....

.....

.....

.....

(Total for Question 1 = 16 marks)

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

2 'Textisms' and literacy study

Researchers wanted to explore the relationship between children's knowledge of text message abbreviations and their standard of literacy.

The researchers gained informed parental consent for 88 British children aged 10–12 years old to be involved in their research study. They asked the participants to compose a series of text messages when provided with a set of scenarios. This gave a measure of the children's knowledge of text message (SMS) abbreviations called 'textisms'. An example of a 'textism' could be the use of contractions such as 'txt', 'plz', 'hmwrk'.

Subsequently the researchers measured the children's vocabulary scores using a standardised tool called The British Picture Vocabulary Scales II (Dunn, Dunn, Whetton & Burley, 1997).

The researchers found that the ratio of 'textisms' used to total words by the children was positively associated with their vocabulary.

(Source: adapted from Plester et al. (2009))

Table 4 shows the vocabulary scores and the ratio of 'textisms' to words used by the children in one class.

Child	Vocabulary score	Ratio of 'textisms' to words used in the scenarios
A	100	0.34
B	87	0.20
C	105	0.45
D	92	0.28
E	98	0.32
F	107	0.49
G	101	0.38
H	96	0.30
I	114	0.51

Table 4

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

(a) Calculate the standard deviation for the vocabulary score using the data in **Table 4**. Show your working and give your answer to **two** decimal places.

(4)

SPACE FOR CALCULATIONS

Standard deviation .....

(b) Explain **one** reason for using the standard deviation rather than the range as a measure of dispersion.

(2)

.....

.....

.....

.....

.....

.....

(c) Explain **one** improvement that could be made to the 'textisms' and literacy study.

(2)

.....

.....

.....

.....

.....

.....

(Total for Question 2 = 8 marks)

TOTAL FOR SECTION A = 24 MARKS

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

BLANK PAGE

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

Review of Studies

3 Reconciliation after romantic conflict study

Researchers investigated male and female beliefs regarding how to reconcile after romantic conflict with their partner.

In the first part of their study they asked 20 males and 18 females to write down five acts or behaviours they believe that people of their own sex perform (or may perform) to attempt to reconcile with their partner after they have experienced romantic conflict.

The most common acts or behaviours that participants proposed are shown in **Table 5**.

Act or Behaviour
Communicate
Apologise
Forgive your partner
Spend time together
Give a kiss / hug / affection
Make your partner laugh
Take some space
Ignore partner / avoid partner
Vent to a friend
Cry
Drink alcohol

Table 5

In the second part of their study the researchers asked the participants to rate the perceived effectiveness of the acts or behaviours they had proposed in the first part of the study. They had to rate them from 1 (very ineffective) to 7 (very effective).

The mean ratings for the males and females are shown in **Table 6**.

Act or Behaviour	Males (1–7)	Females (1–7)
Communicate	5.99	6.13
Apologise	5.14	5.98
Forgive your partner	5.63	5.62
Spend time together	5.29	5.72
Give a kiss / hug / affection	5.15	4.99
Make your partner laugh	5.12	4.09
Take some space	4.66	5.02
Ignore partner / avoid partner	1.85	1.73
Vent to a friend	3.17	2.84
Cry	2.32	3.25
Drink alcohol	1.83	1.55

Table 6

(Source: adapted from Wade et al. (2017))

(a) The researchers wanted to see if there was a significant difference in the perceived effectiveness of crying. They conducted a Mann-Whitney U test and found an observed / calculated value of 110 for a 5% level of significance with a two-tailed test.

Explain what this shows in terms of the perceived effectiveness of crying in the reconciliation after romantic conflict study.

(2)

.....

.....

.....

.....

.....

.....

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

(b) Using research evidence, explain how far social learning theory could account for the findings of the reconciliation after romantic conflict study.

(6)

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

(Total for Question 3 = 8 marks)

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

4 Evaluate Watson and Rayner (1920) and Sherif et al. (1954 / 1961) in terms of ethical issues.

(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

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 4 = 16 marks)

TOTAL FOR SECTION B = 24 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

SECTION C

Issues and Debates

5 Jay and his friends are 17 year-olds and are all learning to drive a car. Some of his friends are studying for their theory test and some are practising for their practical test. Nishka passed both tests on her first attempt whilst Oscar failed his first and second attempts at the theory test.

Jay enjoys watching Formula 1 car racing and his favourite driver won the championship last season. Jay loves Go Karting, and his father encourages and praises him. He recently won a race. Jay took his practical driving test, but he failed his first attempt due to speeding.

Until he can take his test again Jay is being driven to college by Nishka. She keeps forgetting the route to school so has to use a Sat Nav device on her phone to guide them.

Evaluate the extent to which human behaviour, such as the ability to drive, can be explained by biological psychology.

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

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

(Total for Question 5 = 12 marks)

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

6 Assess the impact of socially-sensitive research in psychology.

(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

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 6 = 20 marks)

TOTAL FOR SECTION C = 32 MARKS
TOTAL FOR PAPER = 80 MARKS

BLANK PAGE

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

BLANK PAGE

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