Write your name here

| Surname | Other names |
|---|---|
| | |

**Pearson Edexcel**
**International Advanced Level**

Centre Number | | | | | |

Candidate Number | | | | |

# Psychology

## International Advanced Subsidiary
## Paper 1: Social and Cognitive Psychology

Tuesday 18 October 2016 – Afternoon
**Time: 1 hour 30 minutes**

Paper Reference
**WPS01/01**

**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 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* ▶

P50720A



1/1/1/1/1/1

P 5 0 7 2 0 A 0 1 2 4

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** |
| **4** | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| **5** | 0.700 | 0.900 | 0.900 | 1.000 | 1.000 |
| **6** | 0.657 | 0.771 | 0.829 | 0.943 | 0.943 |
| **7** | 0.571 | 0.679 | 0.786 | 0.857 | 0.893 |
| **8** | 0.548 | 0.643 | 0.738 | 0.810 | 0.857 |
| **9** | 0.483 | 0.600 | 0.683 | 0.767 | 0.817 |
| **10** | 0.442 | 0.564 | 0.649 | 0.733 | 0.782 |
| **11** | 0.418 | 0.527 | 0.609 | 0.700 | 0.755 |
| **12** | 0.399 | 0.504 | 0.587 | 0.671 | 0.727 |
| **13** | 0.379 | 0.478 | 0.560 | 0.648 | 0.698 |
| **14** | 0.367 | 0.459 | 0.539 | 0.622 | 0.675 |
| **15** | 0.350 | 0.443 | 0.518 | 0.600 | 0.654 |
| **16** | 0.338 | 0.427 | 0.503 | 0.582 | 0.632 |
| **17** | 0.327 | 0.412 | 0.482 | 0.558 | 0.606 |
| **18** | 0.317 | 0.400 | 0.468 | 0.543 | 0.590 |
| **19** | 0.308 | 0.389 | 0.456 | 0.529 | 0.575 |
| **20** | 0.299 | 0.378 | 0.444 | 0.516 | 0.561 |
| **21** | 0.291 | 0.369 | 0.433 | 0.503 | 0.549 |
| **22** | 0.284 | 0.360 | 0.423 | 0.492 | 0.537 |
| **23** | 0.277 | 0.352 | 0.413 | 0.482 | 0.526 |
| **24** | 0.271 | 0.344 | 0.404 | 0.472 | 0.515 |
| **25** | 0.265 | 0.337 | 0.396 | 0.462 | 0.505 |
| **26** | 0.260 | 0.330 | 0.388 | 0.453 | 0.496 |
| **27** | 0.255 | 0.323 | 0.381 | 0.445 | 0.487 |
| **28** | 0.250 | 0.317 | 0.374 | 0.437 | 0.479 |
| **29** | 0.245 | 0.312 | 0.367 | 0.430 | 0.471 |
| **30** | 0.241 | 0.306 | 0.361 | 0.423 | 0.463 |

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

**Chi-squared distribution formula**

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

**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.**

**BLANK PAGE**

**SECTION A BEGINS ON THE NEXT PAGE.**

## SECTION A

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

**1** A researcher conducted a study in Spain to see if people would obey instructions given by a stranger. The researchers used two male confederates dressed either in everyday clothes or in a security guard uniform. The confederates stood on a public street and gave instructions to people walking past to pick up a piece of litter and put it in the bin.

The results of this investigation are shown in **Table 1**.

| Condition | Number of people obeying instructions | Number of people refusing to obey instructions |
|---|---|---|
| **Condition A** Confederate wearing everyday clothes | 30 | 90 |
| **Condition B** Confederate wearing a security guard uniform | 110 | 14 |

**Table 1**

(a) Suggest **two** conclusions that can be drawn from this study.

**(2)**

1 .....

.....

2 .....

.....

(b) Calculate the fraction of people **refusing to obey instructions** in condition A.

**(1)**

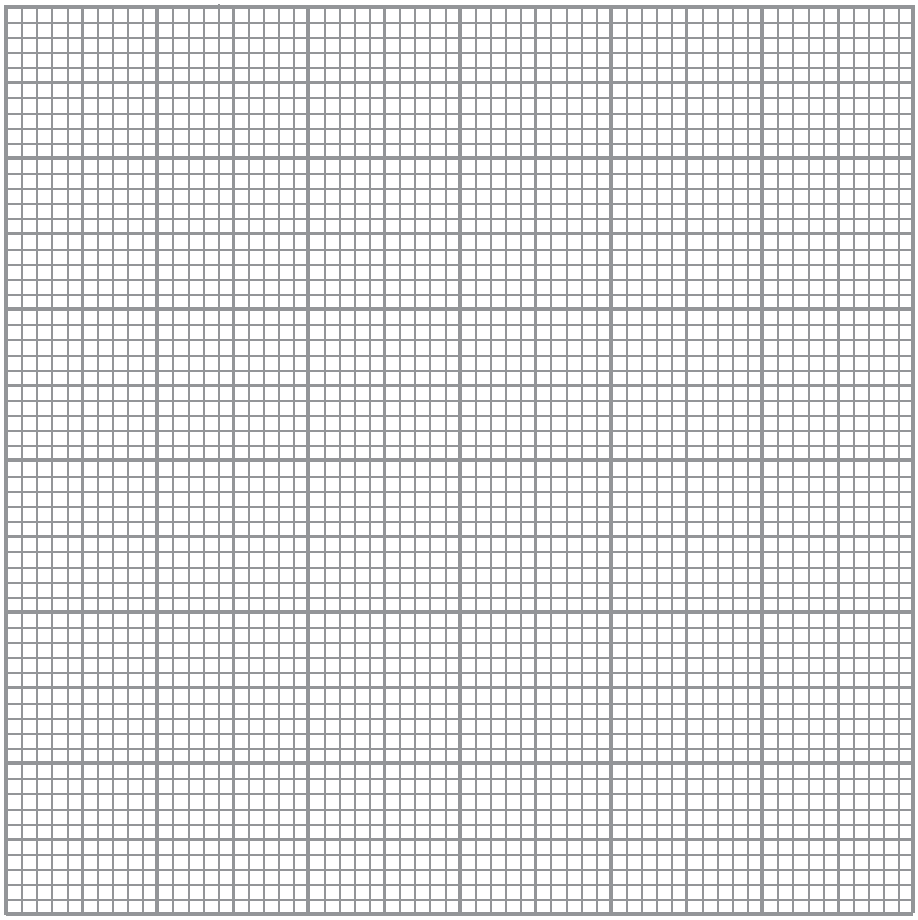
**Space for calculations**

**Fraction of people refusing to obey instructions in condition A** .....

(c) Draw an appropriate graph to show the number of people **obeying instructions** in each condition.

**(3)**

Title



**(Total for Question 1 = 6 marks)**

**2** Milgram (1963) conducted research into obedience using a laboratory experiment. His original study was conducted at Yale University with male participants recruited using an advert in a local newspaper.

(a) Explain **three** ethical issues with Milgram's original study.

**(6)**

1 .....

.....

.....

.....

.....

.....

2 .....

.....

.....

.....

.....

.....

.....

3 .....

.....

.....

.....

.....

.....

(b) Milgram (1963) conducted several variations of his original study in order to investigate the impact of situational factors on obedience to authority figures.

State **two** conclusions made by Milgram following his variation studies.

**(2)**

1 .....

.....

2 .....

.....

(c) Milgram (1963) explained obedience to authority using agency theory.

Explain **one** strength and **one** weakness of agency theory as an explanation of obedience to authority.

**(4)**

Strength

Weakness

**(Total for Question 2 = 12 marks)**

**3** Psychologists claim there are different types of conformity, including compliance and internalisation. A teacher claims that her students conform to the school's expectations of punctuality, tidy uniform, good attendance and handing in homework because they have internalised these. However, her friend argues that the student behaviour is more likely to be due to compliance with the school's expectations and not internalisation.

Discuss how compliance **and** internalisation can explain the behaviour of students in the school.

You must refer to the context in your answer.

**(8)**

**(Total for Question 3 = 8 marks)**

**TOTAL FOR SECTION A = 26 MARKS**

**BLANK PAGE**

**SECTION B BEGINS ON THE NEXT PAGE.**

## SECTION B

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

**4** As part of your studies in cognitive psychology, you will have conducted a practical investigation.

(a) Describe how you operationalised the variables in your practical investigation.

**(2)**

(b) Give **two** conclusions you reached in your practical investigation.

**(2)**

1

2

(c) Explain **one** way demand characteristics were controlled in your practical investigation.

**(2)**

**(Total for Question 4 = 6 marks)**

**5** In cognitive psychology, you will have learned about the following contemporary study in detail:

- **Schmolk et al (2002)** Semantic knowledge in patient HM and other patients.

(a) State the aim of Schmolk et al's (2002) study.

**(1)**

(b) State **three** conclusions drawn by Schmolk et al (2002) from their study.

**(3)**

1

2

3

**(Total for Question 5 = 4 marks)**

**6** A group of researchers are testing whether the number of words that can be recalled from a list is influenced by gender. One group of participants is female and the other group of participants is male. Participants have to learn and recall words from a list of 50. Each participant is given a recall score out of 50.

(a) Give a fully operationalised non-directional (two-tailed) hypothesis for this study.

**(2)**

.....

.....

.....

.....

(b) The results of this study are shown in **Table 2**.

| Male participants<br>Number of words recalled | Female participants<br>Number of words recalled |
|---|---|
| 21 | 25 |
| 20 | 36 |
| 18 | 23 |
| 18 | 21 |
| 25 | 19 |
| 6 | 9 |
| 22 | 20 |
| 31 | 24 |
| 18 | 24 |
| 17 | 23 |
| 20 | 27 |

**Table 2**

Calculate the median score for male participants.

**(1)**

**Space for calculations**

**Median score of words recalled by male participants** .....

(c) Explain why the median is an appropriate measure of central tendency for the data in this study.

**(2)**

.....

.....

.....

.....

**(Total for Question 6 = 5 marks)**

**7** Psychologists can use the experimental method for investigations. This is particularly the case in much of the research carried out in cognitive psychology. However, case studies can provide more in-depth detail about memory.

Justify the use of the experimental method instead of case studies in cognitive psychology.

**(Total for Question 7 = 3 marks)**

**BLANK PAGE**

**8** Baddeley and Hitch (1974) used the working memory model to explain processing and storing of cognitive information.

Evaluate the working memory model as an explanation of memory.

**(8)**

**(Total for Question 8 = 8 marks)**

**TOTAL FOR SECTION B = 26 MARKS**

## SECTION C

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

**9** Two groups of people live on opposite sides of a small town. One group call themselves 'The Crew' and the other group call themselves 'The Squad'. They are often fighting over an area in the town that each group claims as its own territory. Each group leader arranges meetings with their members outlining plans to increase their power. The group members do not question these plans.

Evaluate how effectively social power theory can explain group behaviour.

You must refer to the context in your answer.

**(12)**

**(Total for Question 9 = 12 marks)**

**TOTAL FOR SECTION C = 12 MARKS**

**TOTAL FOR PAPER = 64 MARKS**