

**A Level Psychology**

**H567/01** Research methods

**Mock Exam Paper January 2019**

**Time allowed: 2 hours**



**You must have:**

* a calculator

**First name**

**Last name**

**Centre number**

**Candidate**

**number**

# INSTRUCTIONS

* Use black ink.
* Complete the boxes above with your name, centre number and candidate number.
* Answer **all** the questions.
* Write your answer to each question in the space provided. If additional space is required, use the lined page(s) at the end of this booklet. The question number(s) must be clearly shown.
* Do **not** write in the barcodes.

# INFORMATION

* The total mark for this paper is **90**.
* The marks for each question are shown in brackets **[ ]**.
* Quality of extended responses will be assessed in questions marked with an asterisk (\*).
* This document consists of **16** pages.

**Turn over**

# SECTION A: Multiple choice

Answer **all** the questions in Section A.

1. What is the name used for the technique that enables qualitative data to be recorded in a quantitative way?
	1. coding frame
	2. collection frame
	3. conduct frame
	4. construct frame

Your answer

# [1]

1. Which of these best describes a quasi experiment?
2. dependent variable is directly manipulated
3. dependent variable is not directly manipulated
4. independent variable is directly manipulated
5. independent variable is not directly manipulated

Your answer

# [1]

1. What type of observation is conducted in a real-life setting where participants are not usually aware they are being studied?
2. ecological
3. naturalistic
4. realistic
5. secretive

Your answer

# [1]

1. Which of these best describes what the variance is?
2. measure of central tendency
3. measure of dispersion around the mean
4. measure of proportionality
5. measure of quantifiable data

Your answer

# [1]

1. Which of these indicates the research is significant at the 5% level of probability?

**A** p<0.005

**B** p<0.05

**C** p>0.005

**D** p>0.05

Your answer

# [1]

1. Which of these refers to making a Type 1 error?
2. abandoning the null hypothesis
3. ignoring the null hypothesis
4. incorrectly accepting the null hypothesis
5. incorrectly rejecting the null hypothesis

Your answer

# [1]

1. What is 7.864 written to two significant figures?

|  |  |
| --- | --- |
| **A** | 7.8 |
| **B** | 7.86 |
| **C** | 7.9 |
| **D** | 8.0 |

Your answer

# [1]

1. What is the median for this set of data 10, 12, 6, 5, 14, 3?

|  |  |
| --- | --- |
| **A** | 6.5 |
| **B** | 7.5 |
| **C** | 8.0 |
| **D** | 16.0 |

Your answer

# [1]

1. What is the collective term for the mean, median and mode?
2. measures of central dispersion
3. measures of central range
4. measures of central significance
5. measures of central tendency

Your answer

# [1]

|  |  |  |
| --- | --- | --- |
| **10** | Which | of these is a non-parametric inferential statistical test? |
|  | **A** | Mann Whitney U |
|  | **B** | mean |
|  | **C** | range |
|  | **D** | standard deviation |

Your answer

# [1]

1. A newspaper includes 12 pages of sport and eight pages of TV. What is the ratio of sport to TV? Give your answer in its simplest form.

|  |  |  |
| --- | --- | --- |
| **A****B** | 2:33:2 |  |
| **C****D** | 8:1212:8 |  |  |
| Your | answer |  |  |

# [1]

1. In which of the following sections of the write-up of a practical report would you find a full copy of the standardised instructions read to the participants?
	1. abstract
	2. appendices
	3. materials
	4. procedure

Your answer

# [1]

1. What is 2,830 written in standard form?

**A** 2.83 x 102

**B** 2.83 x 103

**C** 2.83 x 104

**D** 2.83 x 105

Your answer

# [1]

1. Bandura et al. recorded children’s behaviour every five seconds for a period of 20 minutes in their study of the imitation of aggression. What type of sampling of behaviour is this aspect of the study?
2. event
3. participant
4. structured
5. time

Your answer

# [1]

1. What sampling technique was used to obtain participants in the study of whistleblowers by Bocchiaro et al.?
2. opportunity
3. random
4. self-selected
5. snowball

Your answer

# [1]

1. Which of these is nominal data?
2. classifying participants as ‘good’, ‘average’ or ‘poor’
3. ratings by an independent observer on a scale of 1 (very good) to 10 (very poor)
4. self-ratings by participants on a scale of 1 (very good) to 10 (very poor)
5. use of a stop-watch to record reaction time

Your answer

# [1]

1. In which section of the write-up of a practical report would you find details of work conducted by other psychologists?
2. appendices
3. introduction
4. materials/apparatus
5. procedure

Your answer

# [1]

1. What is the term that describes the process whereby other psychologists comment on research before it is published?
2. peer review
3. private review
4. pseudo review
5. public review

Your answer

# [1]

1. How many independent groups were there in experiment 1 of Loftus and Palmer’s study investigating the effects of language on memory?

|  |  |
| --- | --- |
| **A** | 2 |
| **B** | 3 |
| **C** | 4 |
| **D** | 5 |

Your answer

# [1]

1. Which of these best describes the type of data collected in Loftus and Palmer’s study investigating the effects of language on memory?

**A** both quantitative and qualitative **B** neither qualitative or quantitative **C** qualitative

**D** quantitative

Your answer

# [1]

# SECTION B: Research design and response

Answer **all** the questions in Section B.

Memory can be influenced by many different things, including the appearance of what it is we are trying to remember. For example, green is a natural colour that features a lot in our environment, so may help improve how we learn and remember things we see in this colour. To investigate this psychologists want to use the laboratory experiment method to investigate if presenting words in green ink compared to black helps improve memory.

1. Participants for the study will be obtained by putting up a poster on a notice board in a large local supermarket asking for volunteers for a study investigating factors influencing memory.
2. What type of sampling technique is this?

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1. Describe **one** strength and **one** weakness of using this sampling technique in this study.

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1. Write a one-tailed alternative hypothesis for this study.

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**23\*** Explain how you would conduct a study using the laboratory experiment method to investigate the effect of colour on memory for a list of words. Justify your decisions as part of your explanation. You must refer to:

* the use of independent measures design or repeated measures design
* how the variables are operationalised
* at least two control features
* level of data collected

You should use your own experience of carrying out an experiment to inform your response.

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1. Evaluate the use of matched participants design if it had been used in this study.

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1. Psychologists want to conduct a follow-up study using the self-report method to investigate other things that may influence memory.
	1. Suggest **one** open question that could be used in this study.

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* 1. Suggest **one** closed question that could be used in this study.

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* 1. Suggest **one** question using a rating scale that could be used in this study.

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# SECTION C: Data analysis and interpretation

Answer **all** the questions in Section C.

An educational psychologist conducted research investigating if there was any correlation between performance in two different but related subjects studied by GCSE students. If a student is good at one, are they also good at the other, and if they perform poorly in one does that mean that they will also struggle to do well in the other one? Data from a small sample is presented in the table below.

|  |
| --- |
| **Table showing test results from two different subjects studied by a group of participants** |
| **Participant** | **Maths test score** | **Physics test score** |
| a | 20 | 23 |
| b | 15 | 17 |
| c | 6 | 24 |
| d | 28 | 30 |
| e | 8 | 12 |
| f | 11 | 14 |
| g | 22 | 24 |
| h | 4 | 7 |

1. What level of data is obtained in this study?

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1. What is the ratio of participant C’s Maths to his Physics test scores?

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1. What is the mode for the Physics test scores?

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1. Suggest **one** advantage of using mean instead of the mode to analyse the data from the test scores.

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1. Identify **two** findings from the data presented in this table.

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|  |  |  |
| --- | --- | --- |
| **Participant** | **Maths test score** | **Physics test score** |
| a | 20 | 23 |
| b | 15 | 17 |
| c | 6 | 24 |
| d | 28 | 30 |
| e | 8 | 12 |
| f | 11 | 14 |
| g | 22 | 24 |
| h | 4 | 7 |
|  |  |  |

1. Draw a scatter diagram displaying the results of this study.

# [4]

1. **(a)** Calculate the range for each test taken.

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1. What conclusion can be reached by interpreting the range for each test?

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1. Suggest **one** advantage of using standard deviation instead of the range to analyse the data from each test.

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1. **(a)** Suggest **two** strengths of using correlation in this study.

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**(b)** Suggest **two** weaknesses of using correlation in this study.

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1. The psychologist used the Spearman’s ranked correlation coefficient test to analyse the data from this study. Explain why this was an appropriate test to use.

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# END OF QUESTION PAPER

# ADDITIONAL ANSWER SPACE

If additional answer space is required, you should use the following lined page(s). The question number(s) must be clearly shown in the margin(s).



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