OCR
Oxford Cambridge and RSA

AS Level Psychology

H167/01 Research methods

Monday 14 May 2018 – Afternoon

Time allowed: 1 hour 30 minutes

7083340233

You must have:
- a scientific or graphical calculator
- a ruler (cm/mm)

H167701

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 **75**.
- The marks for each question are shown in brackets **[ ]**.
- Quality of extended response will be assessed in questions marked with an asterisk (*).
- This document consists of **16** pages.

SECTION A – Multiple choice

Answer **all** the questions. You should put the letter of the correct answer in the box provided.

1 What is the name given to the type of observation where one of the research team becomes a member of the group that is being observed?

A covert

B naturalistic

C overt

D participant

Your answer ☐ **[1]**

2 Which of these best describes an unstructured interview?

A one where there are no fixed number of questions

B one where there are no open questions

C one where there are no pre-planned questions

D one where there are no time limits for respondents to answer

Your answer ☐ **[1]**

3 Which experimental design was used in the Grant et al. study investigating context-dependent memory?

A independent measures

B laboratory experiment

C matched participants

D repeated measures

Your answer ☐ **[1]**

4 Which inferential statistical test requires at least ordinal level data to examine if there is a difference between the data collected from different people in each condition of an experiment?

A Chi-square

B Mann-Whitney U

C Spearman's Rho

D Wilcoxon Signed Ranks

Your answer [ ] **[1]**

5 What sampling technique was used to obtain high functioning adults with autism (HFA), or Asperger Syndrome (AS) in the Baron-Cohen et al. study?

A opportunity

B self-selected

C random

D snowball

Your answer [ ] **[1]**

6 What is the name of the sampling technique whereby each participant suggests another person to take part?

A opportunity

B random

C self-selected

D snowball

Your answer [ ] **[1]**

7 What is the name given to data that is collected directly by researchers themselves, rather than obtaining it from another person or source?

A direct

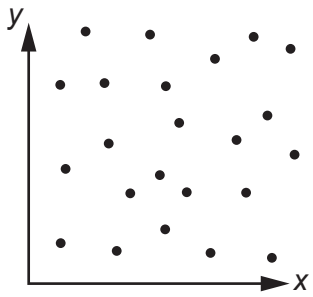
B nominal

C primary

D secondary

Your answer [ ] **[1]**

8 What type of correlation best describes the data displayed in this scatter diagram?



A negative correlation

B no correlation

C positive correlation

D weak correlation

Your answer ☐ **[1]**

9 Which of the following is **not** related to external validity?

A the extent to which findings can be applied to other places

B the extent to which findings can be obtained at other times

C the extent to which findings can be related to other people not involved in the research

D the extent to which findings can be repeated by testing the same people in the same way

Your answer ☐ **[1]**

10 What is the name given to the hypothesis that predicts no difference between two conditions in an experiment?

A alternative

B null

C one-tailed

D two-tailed

Your answer ☐ **[1]**

11 Below is some data from three people in a study that recorded the reaction time in seconds taken to solve a puzzle when background noise was being played:

25.89, 16.21, 20.92 **~** 26, 16, 21

What does the symbol (**~**) in between these sets of data mean?

A approximately equal to

B equal to

C proportional to

D related to

Your answer ☐ **[1]**

12 Which of the following is a feature of psychology as a science?

A augmentation

B innovation

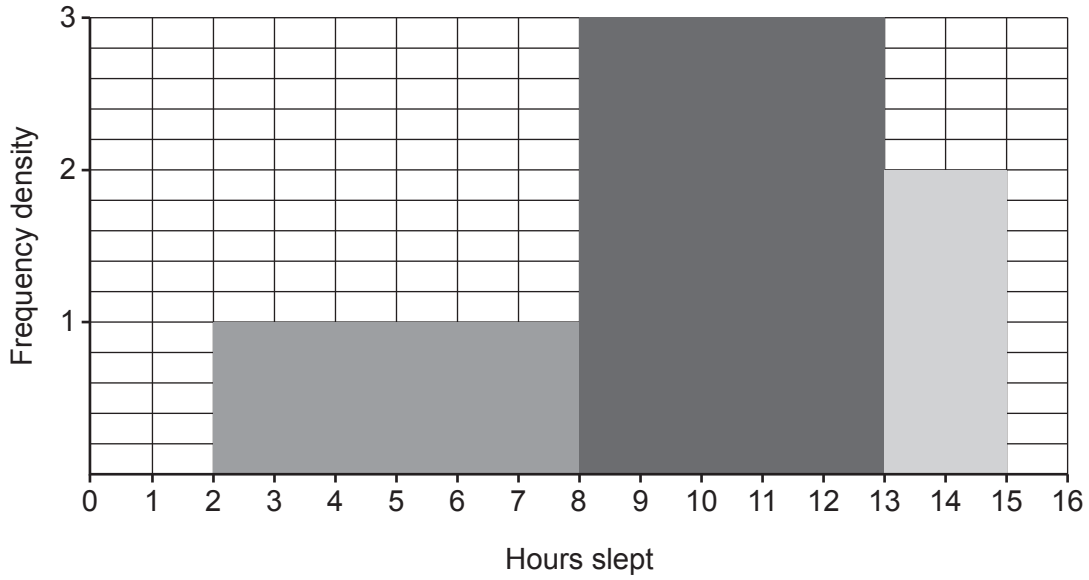
C standardisation

D titration

Your answer ☐ **[1]**

13 A survey was conducted asking a group of students how much they slept each night.

(a) What type of display is used to present the data in the image below?



A bar-chart

B histogram

C line graph

D scatter diagram

Your answer ☐ **[1]**

(b) How many students reported sleeping between 8 and 12 hours?

A 3

B 12

C 15

D 25

Your answer ☐ **[1]**

(c) What was the overall total sample size in this survey?

A 15

B 20

C 25

D 30

Your answer ☐ **[1]**

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SECTION B – Research design and response

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

TV treats. People often eat snack foods, such as crisps, nuts and chocolate whilst watching TV. It may be that the more TV that is watched, the more snack foods are eaten. To investigate this a psychologist wants to use the correlation technique to see if there is a relationship between the amount of TV watched and snack foods eaten.

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

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..... **[3]**

15* Explain how you would conduct a study using the correlation technique to investigate if there is a relationship between the amount of TV watched and snack foods eaten. Justify your decisions as part of your explanation. You must refer to:

- how the participants would be obtained
- how data for each of the measured variables would be obtained
- the control of at least one extraneous variable.

You should use your own experience of practical activities to inform your response.

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16 (a) Describe **one** strength of using the correlation technique in this study.

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(b) Describe **one** weakness of using the correlation technique in this study.

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17 Name the type of graph that would be used to display the data from a correlation analysis.

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18 Explain what the term 'positive correlation' refers to.

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..... **[2]**

19 Explain how you could reduce the possibility of social desirability in this study.

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20 Explain what the term 'criterion validity' refers to in this study.

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21 For each of the following, identify the section (or sub-section) they would appear in when writing-up the practical report for this study.

(a) Raw data

..... **[1]**

(b) Replicable details of how the study was conducted

..... **[1]**

(c) Names, dates and place of publication of work by other researchers

..... **[1]**

(d) An evaluation of the way the study was conducted

..... **[1]**

SECTION C – Data analysis and interpretation

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

Looks tasty? A psychologist wanted to investigate how expectations influence our perception of food. To do this she conducted an experiment where she presented one group of participants a bag of crisps labelled as 'premium range' in a bright and colourful packet. A different group of participants were presented with the same crisps but labelled as 'budget range' in a plain packet. After eating some of the crisps participants were asked to rate how tasty they were on a scale of 1 ('yuk') to 20 ('yummy').

Ratings of how tasty crisps were (1–20)	
Premium labelled brand	**Budget** labelled brand
14	8
18	3
20	10
8	6
18	18
12	14
10	8
19	4
15	7
16	8
18	8
12	2

22 (a) Explain what quantitative data is.

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..... **[2]**

(b) Outline **one** advantage of having quantitative data rather than qualitative data in this study.

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23 **(a)** Name the appropriate inferential statistical test to analyse the data in this study. Give reasons for your answer.

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(b) Explain how you would find the critical value to compare the calculated value to after conducting this test.

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(c) Outline **one** conclusion that could be made about this study if $p<0.05$ appeared in the significance statement after conducting this test.

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24 **(a)** The range and standard deviation are both measures of dispersion. Outline **one** way that they are different.

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(b) Outline **two** conclusions that can be made about this experiment from the calculation of the range.

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25 Explain how the use of the independent measures design in this study could have affected the validity of the data collected.

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END OF QUESTION PAPER

ADDITIONAL ANSWER SPACE

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