



Oxford Cambridge and RSA



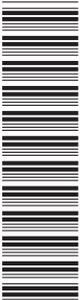
AS Level Psychology

H167/01 Research methods

Sample Question Paper

Date – Morning/Afternoon

Time allowed: 1 hour 30 minutes



You must have:

- the OCR multiple-choice Answer Sheet (MS4)
- the OCR 12-page Answer Booklet (OCR12 sent with general stationery)
- a scientific or graphical 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.
- Section A: Answer all questions on the Answer Sheet.
- Sections B and C: Write your answers to each question in the Answer Booklet. Write the number of each question answered in the margin.
- Do **not** write in the bar codes.

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 **12** pages.

Section A: Multiple choice

Answer **all** the questions in Section A using the separate answer sheet provided.

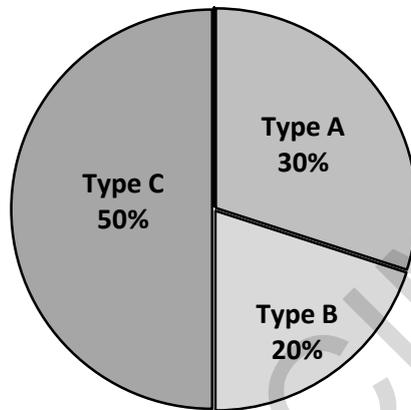
- 1 Which is a type of observation in psychological research?
- A participant
 - B population
 - C practical
 - D principal
- [1]
- 2 What is always included in an academic reference?
- A date of publication
 - B location of research
 - C method used in research
 - D participants used in research
- [1]
- 3 Which is a null hypothesis?
- A 'Extroverted people will not perform significantly better in front of an audience than introverted people.'
 - B 'There will be a significant difference between the performance of extroverted and introverted people when in front of an audience.'
 - C 'There will be a significant negative correlation between how introverted people are and how well they perform in front of an audience.'
 - D 'There will be no significant difference between extroverted and introverted people in terms of how well they perform in front of an audience.'
- [1]
- 4 Which is an example of secondary data?
- A autobiography of a serial killer
 - B observation notes on the behaviours of a serial killer
 - C readings from the brain scan of a serial killer
 - D recording of an interview with a serial killer
- [1]

- 5 What is a strength of using a questionnaire to carry out psychological research?
- A high response rates are guaranteed, giving representative data
 - B questions can be changed in order to follow new lines of enquiry
 - C respondents are unable to lie in their answers, giving reliable data
 - D responses can be compared to identify patterns in data

[1]

- 6 Look at the pie chart below.

A pie chart to show the distribution of infant attachment types of divorced adults.



What fraction of divorced adults had a Type B attachment?

- A $1/5$
- B $3/10$
- C $2/5$
- D $1/2$

[1]

- 7 What is meant by event sampling in psychological observations?
- A participants are observed to identify certain categories of behaviour
 - B every occurrence of behaviour, as specified on a predetermined checklist, is observed and recorded within a specified period of time
 - C participants' behaviours are observed in set intervals of time
 - D occurrences of behaviour are observed and then rated against a set of categories within a specified period of time

[1]

- 8 What is a weakness of using an overt observation in psychological research?
- A high risk of observer effect
 - B low levels of ecological validity
 - C poor generalisability to population
 - D reduced inter-rater reliability

[1]

- 9 Look at the following data from an investigation using the test-retest technique on four personality inventories. The same participants completed all inventories, with the same interval between both tests. All tests were scored out of 100.

Inventory	Mean from Test 1	Mean from Test 2
Alpha	94.0	90.2
Beta	27.5	24.6
Delta	25.3	30.3
Gamma	27.9	89.2

Using the data, which inventory has the highest level of external reliability?

- A Alpha
- B Beta
- C Delta
- D Gamma

[1]

- 10 What is the purpose of an Abstract in a practical report?
- A an overview of the main stages of an investigation
 - B the rationale behind an investigation
 - C the raw data from an investigation
 - D the main conclusions of an investigation

[1]

- 11 Which would give a researcher a random sample of 20 participants?
- A choosing every 3rd person from a list of 60 names listed in order of age
 - B sticking a pin 20 times into a piece of paper listing 50 names in alphabetical order
 - C taking out 20 names from a container of 100 names
 - D using the first 20 people that enter a building

[1]

- 12** What is meant by criterion validity?
- A** how well findings are matched by other research findings
 - B** how well findings generalise to real life situations
 - C** how well findings measure what they intend to measure
 - D** how well findings predict what happens beyond the research
- [1]**
- 13** Which will give the most representative sample of British teenagers in an investigation into the use of the internet?
- A** a sample drawn from five GCSE Computer Science classes in a secondary school
 - B** a sample drawn from ten sixth form colleges across the United Kingdom
 - C** a sample drawn from three secondary schools from different parts of the United Kingdom
 - D** a sample drawn from users of an online gaming website based in the United Kingdom
- [1]**
- 14** Which statement suggests that a researcher is being accused of observer bias?
- A** 'her observation sheet had not been standardised'
 - B** 'her perceptions were influenced by what she expected to see'
 - C** 'she only observed one culture and not any others'
 - D** 'she purposely manipulated her results to match her hypothesis'
- [1]**
- 15** Which is a way of addressing the issue of demand characteristics in an experiment?
- A** not giving instructions to the participants
 - B** not measuring participants' behaviour
 - C** not sharing the aim with participants until the end
 - D** not testing participants together
- [1]**

Section B: Research design and response

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

A psychologist was interested in the relationship between individuals' language ability and their physical co-ordination. She used a correlational analysis to investigate this in a self-selected sample of 34 adult participants.

Each participant completed a language ability test. This test involved both having to spell a list of 20 words and answering 20 closed questions on the meaning of words. The participants' physical co-ordination was then calculated by rating them on six different tasks including balancing on a beam, catching a ball and copying a dance routine.

- 16** The psychologist's hypothesis predicted a significant negative correlation.
Using this information above, explain what she was expecting the results to show. [2]
- 17** Write a closed question which could have been used to test participants' understanding of the meaning of a word. [1]
- 18** Explain why the data collected in this study is an example of quantitative data. [3]
- 19 (a)** Name the graph that would be used to show a correlational analysis. [1]
(b) Name the section of a practical report where a graph would be presented. [1]
- 20 (a)** Describe **one** strength of using a self-selected sample in this study. [3]
(b) Describe **one** weakness of using a self-selected sample in this study. [3]
- 21** Outline how each of the following ethical considerations could have been dealt with in this study.
(a) Confidentiality [2]
(b) Informed consent [2]
(c) Protection of participant [2]
- 22** Explain why the data from the language ability test may be criticised for lacking construct validity. [3]

23* You have been asked to carry out a follow-up study to investigate the difference in the language ability of people when they are carrying out a physical task and when they are not.

Explain how you would carry out an experiment to investigate if there is a difference or not. Justify your decisions as part of your explanation.

[12]

You must refer to:

- field **or** laboratory experiments
- the experimental design you would use
- at least one control you would use.

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

SPECIMEN

Section C: Data analysis and interpretation

Answer all the questions in Section C.

A psychologist carried out a quasi-experimental study to investigate if there is a difference in job satisfaction levels depending on working environment. He looked specifically at whether there was a difference between office workers who had their own personal desk and those that had to 'hot desk,' i.e. had no particular desks and shared all desks with others.

He approached two separate insurance companies – one that used 'hot desking' and one where people had their own personal desk – who agreed to the psychologist interviewing a random sample of employees. A structured interview was used where each employee was rated on how much they enjoyed their job using a scale from 1 to 10, with 10 indicating high job satisfaction.

The results from the study are shown in the table below.

A table to show the frequency of job satisfaction ratings and median ratings for employees working in a hot desking office and employees working in an office with personal desks.

Job Satisfaction Rating	Frequency (tally) from Hot Desking office	Frequency (tally) from Personal Desk office
1	2	0
2	3	2
3	3	2
4	3	4
5	10	8
6	6	8
7	4	8
8	4	0
9	1	0
10	0	0
Median Rating	5	5.5
Range	9	6

24 Outline how a median is calculated.

[2]

25 Outline a conclusion that can be drawn from the above table. Refer to the median ratings as part of your answer.

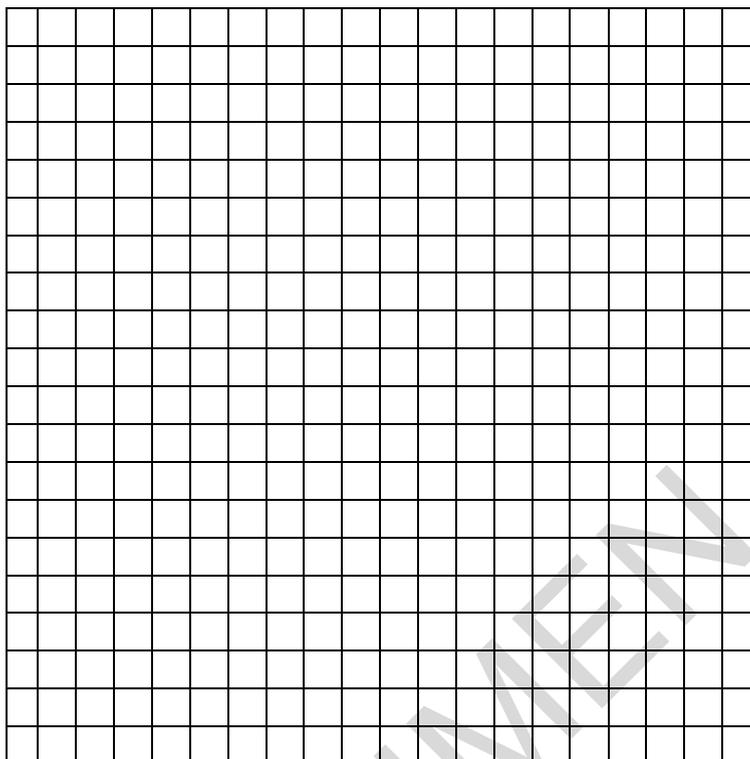
[2]

26 State which office had a greater dispersion of scores. Justify your answer.

[2]

27 Draw a line graph to show the distribution of the frequency of ratings for the hot desking office.

[4]



28 (a) Outline what is meant by a quasi experiment.

[2]

(b) Explain why the investigation into job satisfaction levels is an example of a quasi experiment.

[2]

29 The psychologist used a structured interview to collect the data.

Describe how a structured interview is different from an unstructured interview.

[3]

30 (a) Outline the purpose of peer review in psychological research.

[3]

(b) Following a peer review, the following statement was made about the study above:

‘There is a potential issue with social desirability when considering these findings.’

Explain what this statement means in relation to this study.

[5]

SPECIMEN

SPECIMEN

SPECIMEN

Copyright Information:

OCR is committed to seeking permission to reproduce all third-party content that it uses in the assessment materials. OCR has attempted to identify and contact all copyright holders whose work is used in this paper. To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced in the OCR Copyright Acknowledgements booklet. This is produced for each series of examinations and is freely available to download from our public website (www.ocr.org.uk) after the live examination series.

If OCR has unwittingly failed to correctly acknowledge or clear any third-party content in this assessment material, OCR will be happy to correct its mistake at the earliest possible opportunity.

For queries or further information please contact the Copyright Team, First Floor, 9 Hills Road, Cambridge CB2 1GE.

OCR is part of the Cambridge Assessment Group; Cambridge Assessment is the brand name of University of Cambridge Local Examinations Syndicate (UCLES), which is itself a department of the University of Cambridge.