

GENERAL CERTIFICATE OF SECONDARY EDUCATION
PSYCHOLOGY
Research in Psychology

B543

Candidates answer on the question paper.

OCR supplied materials:
None

Other materials required:
None

Thursday 26 May 2011
Morning

Duration: 1 hour



Candidate forename		Candidate surname	
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Centre number						Candidate number				
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INSTRUCTIONS TO CANDIDATES

- Write your name, centre number and candidate number in the boxes above. Please write clearly and in capital letters.
- Use black ink. Pencil may be used for graphs and diagrams only.
- Read each question carefully. Make sure you know what you have to do before starting your answer.
- Write your answer to each question in the space provided. If additional space is required, you should use the lined page at the end of this booklet. The question number(s) must be clearly shown.
- Answer **all** the questions.
- Do **not** write in the bar codes.

INFORMATION FOR CANDIDATES

- The number of marks is given in brackets [] at the end of each question or part question.
- The total number of marks for this paper is **40**.
- This document consists of **8** pages. Any blank pages are indicated.

SECTION A – PLANNING, DOING AND ANALYSING RESEARCH

Answer **all** questions.

The Source

A psychologist wanted to investigate whether eating breakfast affects reaction time. On the morning of the experiment she invited 20 participants who had volunteered to take part to her laboratory. She had asked half of the participants to eat breakfast one hour before arriving at the laboratory. She had asked the other half of the participants not to eat any breakfast before the experiment.

Each participant was tested individually. The psychologist measured reaction time using the ruler test. The psychologist held a ruler between the participant's fingers and dropped it without warning. The participant then had to try and catch the ruler. This measured their reaction time. Each participant attempted the test once. The results are shown in Table 1 below.

Table 1

Mean time taken in milliseconds (ms) to catch the ruler by participants who had eaten breakfast and by those who had not.

Condition	Mean time taken (ms)
Had eaten breakfast	153
No breakfast eaten	180

- 1 Give the aim of the study in the Source.

.....
 [1]

- 2 State a null hypothesis for this study.

.....

 [2]

- 3 The psychologist used a self-selecting sample of volunteers.

Name **one** other sampling method.

..... [1]

- 4 Using the diagram below:
Identify the independent variable and the dependent variable in the source.

Draw a line from each box in the A column to the correct box in the B column.

A	B
<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;">Independent variable</div> <div style="border: 1px solid black; padding: 5px;">Dependent variable</div>	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;">Participants being tested individually</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;">Mean time taken to catch the ruler</div> <div style="border: 1px solid black; padding: 5px;">Eaten breakfast or not eaten breakfast</div>

[2]

- 5 Name the type of data collected in this study.

Tick **one** box to show your answer.

Qualitative Quantitative

[1]

- 6 Outline the findings from the study in the source.

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..... [2]

- 7 Explain why each participant was tested individually in this study.

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..... [2]

8 (a) Describe **one** strength of using an independent groups design in this study.

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..... [2]

(b) The psychologist used an independent groups design in this study.

Name **one** other experimental design the psychologist could have used.

..... [1]

9 (a) The psychologist used a laboratory experiment.

Explain what is meant by a laboratory experiment.

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..... [2]

(b) Describe **one** disadvantage of using a laboratory experiment for this study.

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..... [2]

10 (a) State **one** extraneous variable that could have occurred in this study.

..... [1]

(b) Outline **one** way in which the psychologist could have controlled for an extraneous variable in this study.

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..... [2]

11 Explain what is meant by validity.

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..... [2]

12 After this experiment, the psychologist planned to investigate whether there is a correlation between how much coffee people drink at breakfast and their reaction time.

Outline how the psychologist would use a correlation study to investigate this.

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..... [2]

Section total: 25 marks

SECTION B – PLANNING AN INVESTIGATION

Answer **all** questions.

You have been asked to carry out a questionnaire to investigate the effects of the weather on mood. The theory is that people’s mood (e.g. how happy, sad, anxious, etc. they are) will vary with changes in the weather.

13 (a) State a hypothesis for your investigation.

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..... [2]

(b) (i) Describe the sampling method you would use to select your participants for your investigation.

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..... [2]

(ii) Outline **one** strength of the sampling method you have chosen for your investigation.

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..... [2]

(c) Explain how you would measure one of the variables in your investigation.

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..... [2]

(d) Briefly outline how you would carry out the questionnaire to investigate the effects of the weather on mood.

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..... [3]

(e) Describe **one** ethical issue you will have to deal with when investigating the effect of the weather on mood.

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..... [2]

(f) Describe **one** strength of using a questionnaire in this investigation.

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..... [2]

Section total: 15 marks

Paper Total: 40 marks

