



Surname _____

Forename(s) _____

Centre Number _____

Candidate Number _____

Candidate Signature _____

I declare this is my own work.

GCSE

PSYCHOLOGY

Paper 1 Cognition and Behaviour

8182/1

Friday 19 May 2023

Afternoon

Time allowed: 1 hour 45 minutes

At the top of the page, write your surname and forename(s), your centre number, your candidate number and add your signature.

[Turn over]



MATERIALS

For this paper you may use:

- **a calculator.**

INSTRUCTIONS

- **Use black ink or black ball-point pen.**
- **Answer ALL questions.**
- **You must answer the questions in the spaces provided. Do not write on blank pages.**
- **If you need extra space for your answer(s), use the lined pages at the end of this book. Write the question number against your answer(s).**
- **Do all rough work in this book. Cross through any work you do not want to be marked.**



INFORMATION

- **The marks for questions are shown in brackets.**
- **The maximum mark for this paper is 100.**
- **Question 18 is a synoptic question in which you will be rewarded for your ability to draw together different areas of knowledge and understanding from across the full course of study.**
- **Questions should be answered in continuous prose. You will be assessed on your ability to:**
 - **use good English**
 - **organise information clearly**
 - **use specialist vocabulary where appropriate.**

DO NOT TURN OVER UNTIL TOLD TO DO SO



SECTION A

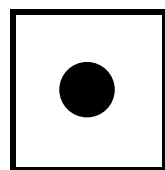
MEMORY

Answer ALL questions in the spaces provided.

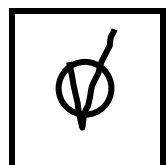
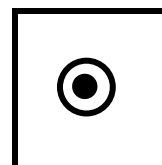
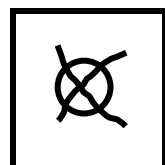
Only ONE answer per question is allowed, except where stated otherwise.

For each question completely fill in the circle alongside the appropriate answer.

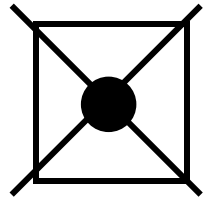
CORRECT METHOD



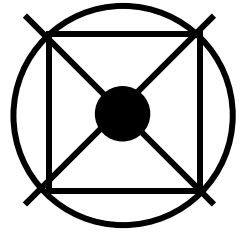
WRONG METHODS



If you want to change your answer you must cross out your original answer as shown.



If you wish to return to an answer previously crossed out, ring the answer you now wish to select as shown.



[Turn over]



0	1
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Which of the following describes semantic memory?

Shade ONE box. [1 mark]

☐

A It contains events that have occurred in our lives

☐

B It helps us carry out physical actions

☐

C It retains information for approximately 30 seconds

☐

D It stores facts about general knowledge and meanings



0	2
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Which of the following is the correct definition of a ‘false memory’?

Shade ONE box. [1 mark]

☐

A A feeling that we have experienced something similar before

☐

B A memory for something that didn’t happen but feels true

☐

C Not being able to remember the correct answer to a question

☐

D The confusion between two similar memories

[Turn over]



0	3
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What is meant by ‘encoding’ as a process of memory? [2 marks]

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[Turn over]



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A researcher wanted to investigate the effect of context on the accuracy of memory.


Describe how she could design a laboratory experiment to do this.

You need to include the following information in your answer:

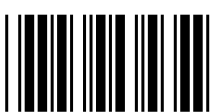
- a task that she could ask participants to carry out AND a description of the data she would collect**
- what the conditions of the independent variable would be**
- one extraneous variable that could affect the results AND how the researcher could control this variable.**

[6 marks]





12

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[Turn over]



0	4	.	2
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The researcher considered different experimental designs when planning her experiment.

Identify AND explain ONE strength and ONE weakness of an independent groups design.

Write your answers in the correct spaces provided. [4 marks]

Strength _____



Weakness _____

[Turn over]



0	5
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Evaluate the multi-store model of memory. [4 marks]

[illegible]

[Turn over]



0	6
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Describe the method used by Bartlett in his 'War of the Ghosts' study. [3 marks]

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Read the following information.

Dan and his Uncle Bill are chatting about the day Dan was born.

Dan: “Uncle Bill, what day of the week was I born on?”

Uncle Bill: “I think you were born on a Tuesday. Or maybe it was your older sister who was born on a Tuesday. I get mixed up.”

Use your knowledge of interference to explain why Uncle Bill cannot accurately remember what day of the week Dan was born on. [4 marks]



25



SECTION B**PERCEPTION**

Answer ALL questions in the spaces provided.

0	8
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‘Fiction’ is one explanation for why people see visual illusions.

Which of the following visual illusions is an example of fiction?

Shade ONE box. [1 mark]

☐

A The Ames room

☐

B The Kanizsa triangle

☐

C The Müller-Lyer

☐

D The Necker cube



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[Turn over]



0	9
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Kishan is studying Food Preparation and Nutrition at school. During one of his lessons, he is asked to close his eyes and taste different foods. He then has to guess what the foods are. He thinks that one of them is very familiar and correctly recognises it as strawberry yoghurt.

State whether Kishan is experiencing sensation OR perception when he correctly recognises the strawberry yoghurt.

Explain your answer. [2 marks]

Sensation OR perception _____

Explanation _____



[Turn over]



1	0
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Read the following article.

In a study investigating perceptual set, 40 participants were asked to place their hand in a bucket of water for 10 seconds whilst listening to music. The temperature of the water was the same for each participant.

They were asked to give a number between 1 and 50 to report how warm they thought the water was.

A score of 1 meant the water felt extremely cold. A score of 50 meant that the water felt extremely hot.

There were two conditions of the experiment. All participants completed both conditions.



In CONDITION A, participants listened to a famous song that is associated with winter and Christmas.

In CONDITION B, participants listened to a famous song that is associated with summer and the sunshine.

[Turn over]



TABLE 1 shows the frequency of reported temperature scores for CONDITION A. One of the scores is missing.

TABLE 1

REPORTED TEMPERATURE SCORE	FREQUENCY
1–5	6
6–10	
11–15	16
16–20	1
21–25	2
26–30	0
31–35	2
36–40	1
41–45	0
46–50	1



1	0	.	1
---	---	---	---

**Name the type of data that is shown in
TABLE 1. [1 mark]**

[Turn over]



REPEAT OF TABLE 1

REPORTED TEMPERATURE SCORE	FREQUENCY
1–5	6
6–10	
11–15	16
16–20	1
21–25	2
26–30	0
31–35	2
36–40	1
41–45	0
46–50	1



1	0	.	2
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Calculate the number of participants who reported a temperature score between 6 and 10.

Show your workings. [2 marks]

Workings:

Number of participants _____

[Turn over]



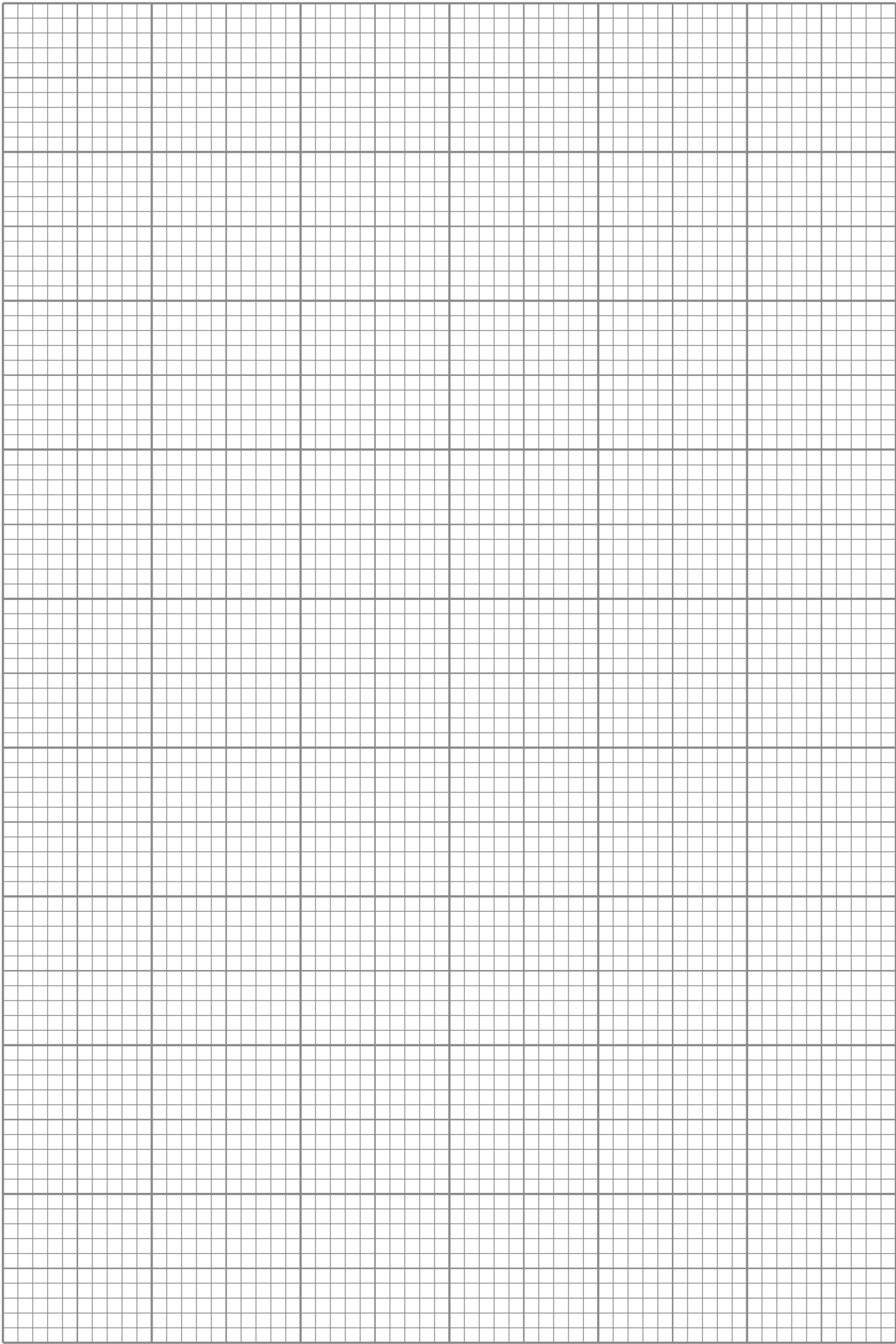
1	0	.	3
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On the opposite page, sketch a histogram to show the results in TABLE 1, on page 30.

Include the number of participants you wrote in answer to Question 10.2, on page 31.

Provide a suitable title and labels for your histogram. [4 marks]

Title _____



[Turn over]



1	0	.	4
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The researcher found that participants in CONDITION B reported the water felt warmer than participants in CONDITION A.

Using your knowledge of ‘perceptual set’, outline ONE conclusion that the researcher could make from these findings. [2 marks]

BLANK PAGE

[Turn over]



1	1
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Bruner and Minturn investigated the effect of expectation on perception.

**Describe Bruner and Minturn's study.
[4 marks]**

[illegible]

[Turn over]



1	2
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Describe AND evaluate Gibson's direct theory of perception. [9 marks]

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40

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[Turn over]



42

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4 2

43

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[Turn over]

25



4 3

SECTION C

DEVELOPMENT

Answer ALL questions in the spaces provided.

1	3
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Which of the following is a small structure at the base of the brain that coordinates movement and balance?

Shade ONE box. [1 mark]

☐

A Brain stem

☐

B Cerebellum

☐

C Cortex

☐

D Thalamus



1	4
---	---

Which of the following is a true statement about people who have a growth mindset?

Shade ONE box. [1 mark]

☐

A They avoid challenges

☐

B They believe ability will improve with practice

☐

C They feel threatened by the success of others

☐

D They ignore negative criticism that is useful

[Turn over]



1	5
---	---

Read the following information.

You have been asked to design an experiment to investigate whether having a fixed mindset or a growth mindset will affect students' performance in their end of year exams.

1	5	.	1
---	---	---	---

Identify what the independent variable and dependent variable would be in your experiment.

Write your answers in the correct spaces provided. [2 marks]

Independent variable _____



Dependent variable _____

[Turn over]

15.2

The target population for your experiment is Year 8 students at a local school.

There are 100 Year 8 students at this school.

Describe how you could select 20 participants for your experiment using random sampling. [3 marks]

[Turn over]



1	6
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Piaget's stage theory describes cognitive development.

**Briefly outline the sensorimotor stage
AND the formal operational stage.
[4 marks]**

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[Turn over]



1	7
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Evaluate Piaget's stage theory of cognitive development. [5 marks]

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[Turn over]



1	8
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McGarrigle and Donaldson investigated the development of conservation in the ‘naughty teddy study’.

Describe this study.

Evaluate the research method used in McGarrigle and Donaldson’s study.
[9 marks]



[illegible]

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25



SECTION D

RESEARCH METHODS

Answer ALL questions in the spaces provided.

1	9
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Read the following information.

At a school sports day, students were asked to run 100 metres on the running track as quickly as they could before and after drinking 150 ml of an energy drink. The researcher recorded the times taken to run 100 metres for each student.



1	9	.	1
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Identify the type of experiment used in this study.

Shade ONE box only. [1 mark]

☐

A Field

☐

B Independent groups

☐

C Laboratory

☐

D Matched pairs

☐

E Repeated measures

[Turn over]



19.2

Identify the experimental design used in this study.

Shade ONE box only. [1 mark]

☐**A Field**☐**B Independent groups**☐**C Laboratory**☐**D Matched pairs**☐**E Repeated measures**

2	0
---	---

Explain ONE difference between primary and secondary data. [3 marks]

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[Turn over]



2	1
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Read the following information.

In a sixth form centre, students have independent study lessons as well as subject lessons.

Students use the sixth form learning area during their independent study lessons. They are expected to use their study lessons to finish work related to their subjects.

Teachers are concerned that some students spend more time chatting to friends than finishing work during study lessons. A researcher is asked to investigate how students are using study lessons.

The researcher asked 30 students to fill in a questionnaire about how they spend



their study lessons. They selected participants using stratified sampling.

21.1

Explain ONE weakness of using a stratified sample when conducting research. [2 marks]

[Turn over]



21.2

The responses of participants to Question 1 of the questionnaire are shown in TABLE 2.

TABLE 2 Responses of participants to Question 1:

‘Do you think your progress in lessons is positively affected by the amount of time you spend doing independent study?’

YES	NO
19	11

Calculate the percentage of participants who responded YES.

State your answer using TWO significant figures and show your workings.

[3 marks]



Workings:

_____ %

[Turn over]



21.3

Participants were also asked to estimate the amount of time they spent working and chatting to friends during a typical 70 minute study lesson.

The mean estimates for 30 participants are shown in TABLE 3, on page 70.

BLANK PAGE

[Turn over]



TABLE 3 Mean estimated amount of time spent working and chatting to friends during a typical 70 minute study lesson for 30 participants.

ACTIVITY	MEAN ESTIMATED TIME (IN MINUTES)
Time spent WORKING during a typical 70 minute study lesson.	60
Time spent CHATTING TO FRIENDS during a typical 70 minute study lesson.	10



What is the ratio of time spent WORKING compared to time spent CHATTING TO FRIENDS?

**Write this ratio in its simplest form.
[2 marks]**

Answer _____

[Turn over]



21.4

Read the following information.

The researcher wanted to find out more about the TYPES OF LEARNING ACTIVITY happening during study lessons. They decided to observe the actual behaviour of the same participants during study lessons. They worked with an assistant using CCTV camera recordings of the sixth form learning area during study lessons. They used recordings taken over the past two days.



Identify TWO ethical issues that researchers should consider in observation studies. [2 marks]

Ethical issue 1 _____

Ethical issue 2 _____

[Turn over]



21.5

On the opposite page, sketch a FREQUENCY TABLE the researcher and their assistant can use to collect information about the types of learning activity participants do during study lessons.

Include TWO categories of behaviour about TYPES OF LEARNING ACTIVITY in your frequency table.

DO NOT include ‘chatting to friends’ and ‘completing work’ as categories of behaviour. [4 marks]



[Turn over]



21.6

The psychologist and their assistant had high interobserver reliability in their observation study.

**Define what is meant by ‘interobserver reliability’ in observational research.
[2 marks]**

BLANK PAGE

[Turn over]



21.7

From the results of the observation, the researcher realised that students spent more time chatting to friends during study lessons than they had estimated on the questionnaire.

Briefly evaluate the use of questionnaires in psychological research.

In your answer, refer to the questionnaires about the use of study lessons that the sixth form students had filled in. [5 marks]

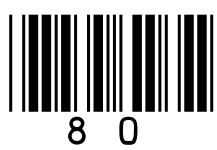
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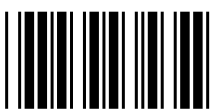
END OF QUESTIONS

25



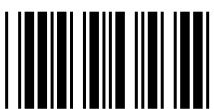
Additional page, if required.

Write the question numbers in the left-hand margin.



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Section	Mark
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