



GCE AS/A LEVEL

2290U20-1

THURSDAY, 26 MAY 2022 – AFTERNOON

PSYCHOLOGY – AS unit 2

Using Psychological Concepts

**1 hour 15 minutes plus your additional
time allowance**

Surname _____

First name(s) _____

Centre Number _____

Candidate Number 2 _____

For Examiner's use only		
Question	Maximum Mark	Mark Awarded
1.	3	
2.	4	
3.	6	
4.	4	
5.	3	
6.	17	
7.	10	
8.	13	
Total	60	

ADDITIONAL MATERIALS

You may require a calculator and a ruler.

INSTRUCTIONS TO CANDIDATES

Use black ink, black ball-point pen or your usual method.

Write your name, centre number and candidate number in the spaces provided on the front cover.

Answer ALL questions.

Write your answers in the spaces provided in this booklet. If you run out of space, use the additional page(s) at the back of the booklet, taking care to number the question(s) correctly.

(Turn over)

INFORMATION FOR CANDIDATES

The number of marks is given in brackets at the end of each question or part-question.

You are reminded of the necessity for good English and orderly presentation in your answers.

Assessment will take into account the quality of written communication used in your answers.

(Turn over)

Answer ALL questions.

PRINCIPLES OF RESEARCH

- 1. Using an example, describe ‘event sampling’. [3 marks]**

(Turn over)

5

(Turn over)

2. Using examples from Milgram's (1963) 'Behavioral study of Obedience', explain the term 'deception'.

[4 marks]

[illegible]

(Turn over)

7

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(Turn over)

- 3. Discuss the strengths AND weaknesses of a repeated measures experimental design. [6 marks]**

10

- 4. Using an example, explain what is meant by 'conducting research in the field'. [4 marks]**

(Turn over)

5 (a) Define 'secondary sources'. [1 mark]

5 (b) Briefly explain ONE disadvantage of using secondary sources in research. [2 marks]

- 6. A group of psychologists were interested in whether there was a relationship between attitudes to climate change and recycling behaviour.**

Participants were asked to respond to a series of questions including:

‘How concerned are you about climate change?’

An additional nine questions were asked on subjects including social and political issues, recycling behaviour, plastic pollution and global warming.

6 (a) (i)

Identify a methodology that could be used by the psychologists to collect participants' responses to the questions in this research. [1 mark]

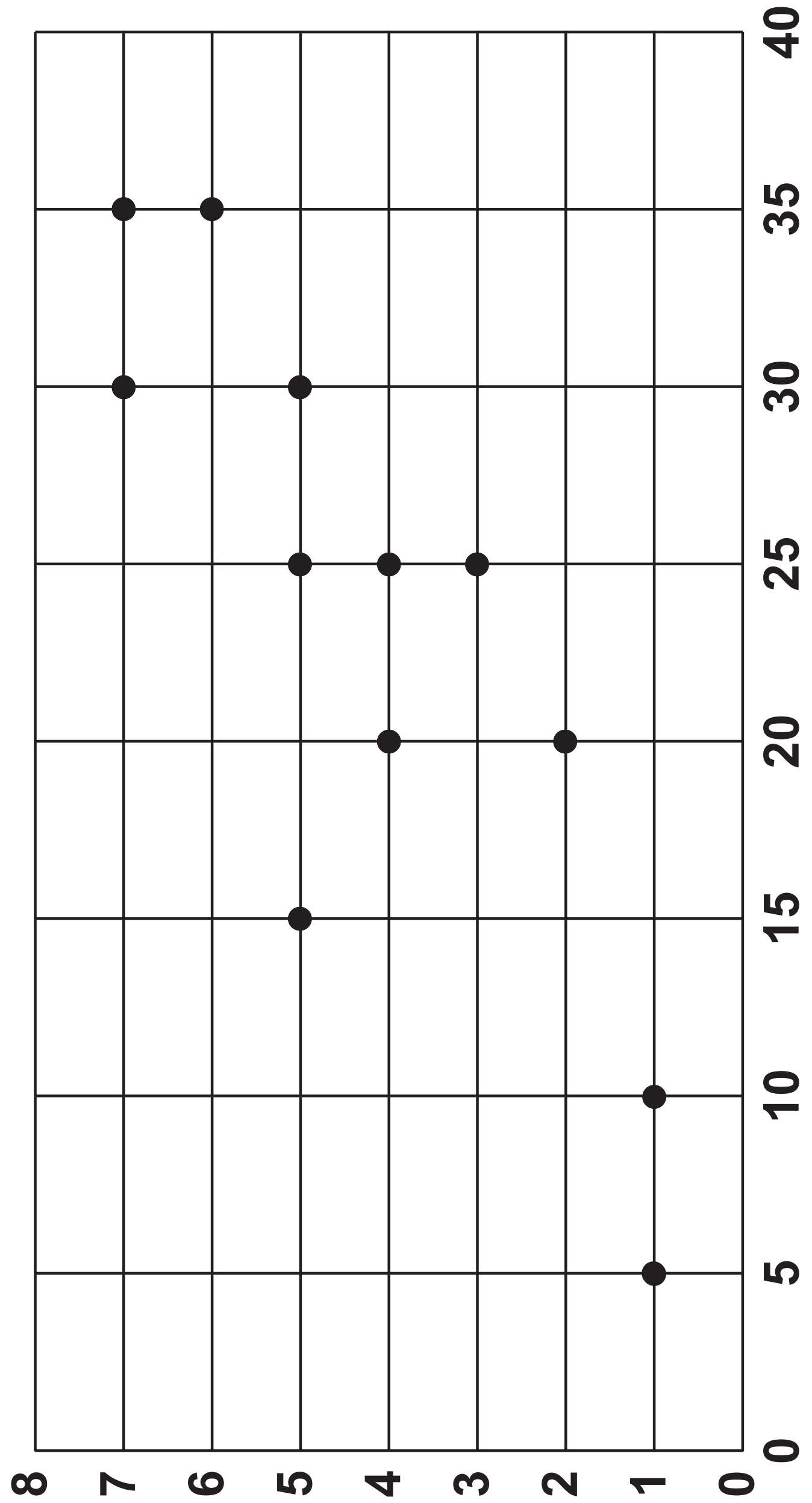
6 (a) (ii)

Justify why the methodology you identified in part (a) (i) could be considered appropriate in this research. [2 marks]

6 (b) Responses to the question ‘How concerned are you about climate change?’ were measured on a scale of 1 – 7. Identify the level of measurement used to record the participants’ responses. [1 mark]

Figure 1: A correlation of concern about climate change and recycling behaviour

**Concern about climate change
on a scale of 1 – 7**



Number of items recycled per week

The psychologists correlated the results for participants to see if there was a relationship between concern about climate change and recycling behaviour.

Results are displayed in the diagram opposite (Figure 1).

6 (c) (i)

State the strength AND direction of the correlation displayed in this research. [2 marks]

(Turn over)

6 (c) (ii)

Using the data from the diagram (Figure 1), describe ONE conclusion about the ratings for concern compared to the number of items recycled. [3 marks]

(Turn over)

6 (d) With reference to the scenario, briefly discuss ONE weakness of a correlational study. [2 marks]

One question from the research asked ‘How concerned are you about rising global temperatures?’

The results from the first five participants can be seen below.

PARTICIPANT NUMBER	CONCERN SCORE (X)
1	6
2	2
3	4
4	6
5	3

$$\sqrt{\frac{\sum (x - \bar{x})^2}{n - 1}}$$

(Turn over)

6 (e) Using this data, calculate the standard deviation of the concern score. Show your workings.

[6 marks]

7. Past research suggested that most adults completed four to eight sleep cycles of around 90 minutes each night. To look more closely at this, a researcher conducted a study in a university sleep laboratory on volunteers whose night's sleep lasted between six and nine hours.

(a) Explain what is meant by 'conducting research in a laboratory environment'. [3 marks]

- 7 (b) Explain how the psychologist could have collected a self-selected sample at the start of the study.**
[3 marks]

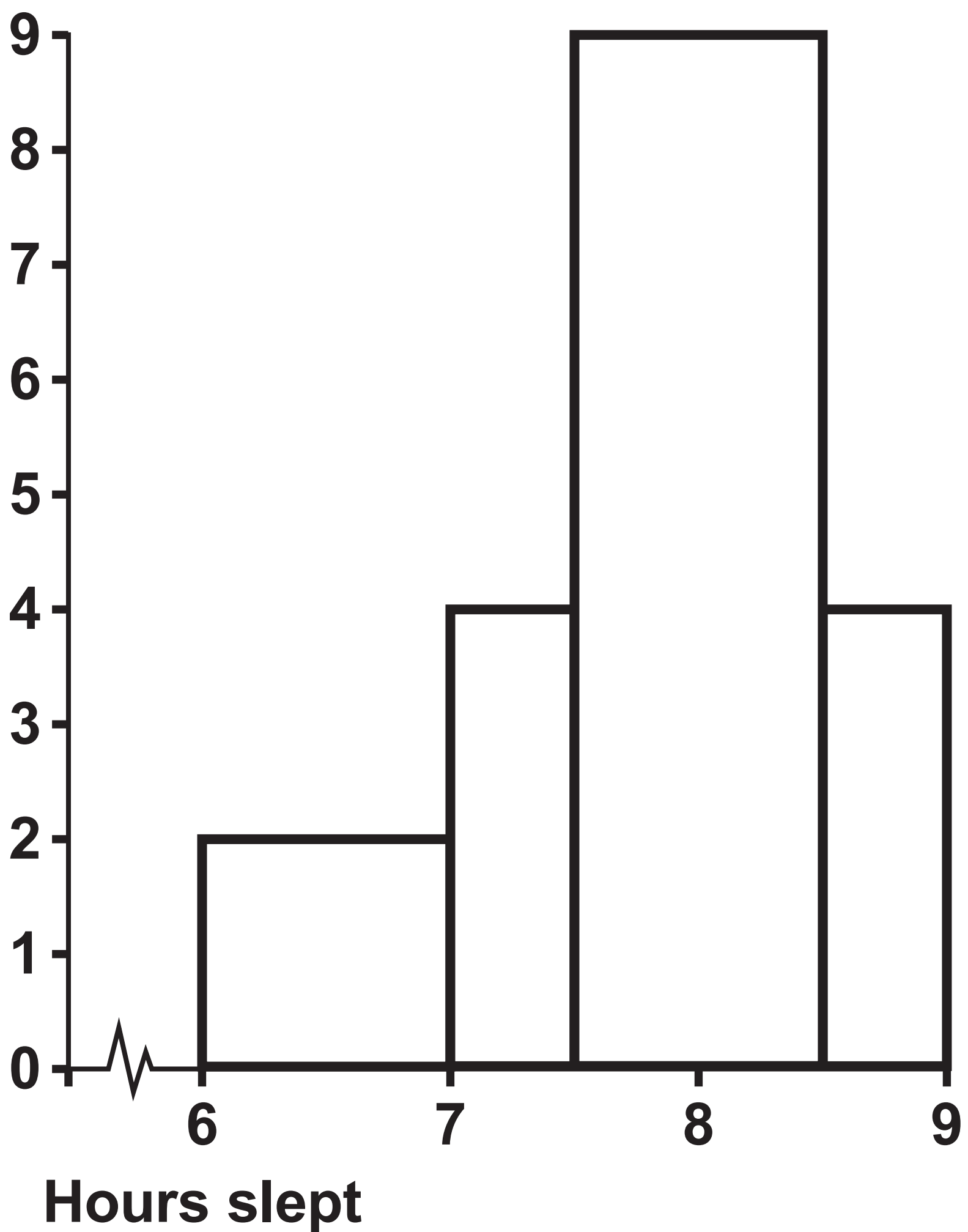
- 7 (c) After conducting the research, the psychologist was talking to a colleague about their findings. The colleague claimed that ‘sleep studies lack external validity’. Explain why the colleague is correct, referring to the scenario in your answer.**

[2 marks]

(Turn over)

Figure 2: Graphical representation to show frequency of hours slept between 6 and 9 hours

Frequency density



7 (d) The psychologist displayed the data opposite.

(i) Identify the graphical representation for this research (Figure 2). [1 mark]

7 (d) (ii)

Give ONE reason why it would be appropriate to choose this graphical representation for this research.

[1 mark]

(Turn over)

Figure 3: Table to show ratings of belief (1 – 10) for the fake news article at the start and the end of the study.

PARTICIPANT	RATING AT START OF RESEARCH	RATING AT END OF RESEARCH
A	3	4
B	5	10
C	2	4
D	1	3
E	1	5
F	3	6
G	3	6

8. **A group of researchers aimed to find out whether people begin to believe fake news when it is repeated. The researchers asked participants to read news articles, over a five-week period, and rate how much they believed each article to be true (on a scale of 1 – 10) after each session. Articles of fake news were repeated in every other week. They compared the ratings from the start and end of the research to see the influence of repetition.**

The results can be seen in the table opposite.

8 (a) (i)

Calculate the median rating for the start of the research. Show your workings. [2 marks]

8 (a) (ii)

Calculate the mean rating for the end of the research. Show your workings.
[2 marks]

8 (b) Write a directional hypothesis for this research. [2 marks]

8 (c) The researchers were worried about demand characteristics from their participants. Explain how they could deal with this validity issue within this research. [2 marks]

8 (d) Explain why it would be important to debrief the participants in this research. [2 marks]

8 (e) Explain the role of an ethics committee. [2 marks]

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