

Psychology

PAPER 2

Total Marks

Time: 1 hour 20 minutes

In the boxes below, write your name, centre number and candidate number.

Surname					
Other names					
Centre Number					
Candidate Number					

YOU MUST HAVE

Calculator, ruler

YOU WILL BE GIVEN

Diagram Booklet

INSTRUCTIONS

There are six sections in this question paper.

Section A – answer ALL questions in

Section A

Sections B to F – select TWO sections

from B to F. Answer ALL questions in

these sections.

Answer the questions in the space provided

in this Question Paper or in the separate

Diagram Booklet - there may be more space

than you need.

Calculators may be used.

You must show all your working out,

with your answers clearly identified at

the end of your solution.

Turn over

INFORMATION

The total mark for this paper is 79.

The marks for EACH question are shown in brackets – use this as a guide as to how much time to spend on each question.

In questions marked with an **ASTERISK (*), marks will be awarded for your ability to structure your answer logically, showing how the points that you make are related or follow on from each other where appropriate.**

There may be spare copies of some diagrams.

ADVICE

Read each question carefully before you start to answer it.

Check your answers if you have time at the end.

INSTRUCTIONS

Section A – answer all questions in this section.

Page	Topic studied
-------------	----------------------

5	Research methods – How do you carry out psychological research?
----------	--

Sections B to F – select TWO sections from B to F. Answer ALL questions in these sections.

Page	Topic studied
-------------	----------------------

38	Section B: Criminal psychology – Why do people become criminals?
-----------	---

58	Section C: The self – What makes you who you are?
-----------	--

79	Section D: Perception – How do you interpret the world around you?
-----------	---

99	Section E: Sleep and dreaming – Why do you need to sleep and dream?
-----------	--

119	Section F: Language, thought and communication – How do you communicate with others?
------------	---

Turn over

SECTION A

Research methods – How do you carry out psychological research?

Answer ALL questions in this section. Write your answers in the spaces provided.

Some questions must be answered with a cross in a box ☐. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☐.

(continued on the next page)

1 Andrew conducted a laboratory experiment to investigate the capacity of short-term memory. He showed participants 20 trigrams and asked them to recall as many of the trigrams as they could.

(a) Andrew counted how many trigrams each participant recalled correctly.

Identify the type of data gathered by Andrew.

(1 mark)

- ☐ **A Qualitative data**
- ☐ **B Subjective data**
- ☐ **C Quantitative data**
- ☐ **D Secondary data**

(continued on the next page)

Turn over

1 continued.

(b) Andrew used a standardised procedure when showing the trigrams to his participants.

**Give TWO ways that Andrew could have standardised his procedure.
(2 marks)**

1 _____

(continued on the next page)

1 continued.

2 _____

(continued on the next page)

1 continued.

(c) Andrew sampled a total of 20 participants. A quarter of the participants were male.

**Calculate the ratio of males to females in the participant sample used by Andrew in his experiment.
(2 marks)**

Ratio _____

(continued on the next page)

1 continued.

(d) Look at Table 1 for Question 1(d) in the Diagram Booklet.

The number of trigrams recalled by participants correctly in Andrew's experiment are shown in Table 1.

**Calculate the percentage of participants who recalled between 9 and 12 trigrams correctly, out of all the participants in the experiment.
(2 marks)**

Percentage _____

(continued on the next page)

Turn over

1 continued.

(e) Explain ONE conclusion that Andrew could make about short-term memory from the results in TABLE 1. (2 marks)

(Total for Question 1 = 9 marks)

Turn over

- 2 Toby is investigating the impact of damage to the left hemisphere of the brain.**

He asked patients with damage to their left hemisphere to complete a questionnaire about the impact it has had on them.

Look at Table 2 for Question 2 in the Diagram Booklet. It shows his results.

- (a) Calculate how many patients had difficulties with the right visual field as a fraction of all patients.
(1 mark)**

Fraction _____

2 continued.

(b) Look at the bar chart for Question 2(b) in the Diagram Booklet.

**Complete the bar chart using the data in TABLE 2, including the label and scale for the y-axis.
(3 marks)**

(Total for Question 2 = 4 marks)

- 3 Juliet investigated whether there was a relationship between the number of hours spent using social media and self-rated body image scores.**

Firstly, Juliet interviewed a sample of 17-year-old students using a structured interview method, where she asked them to state the length of time they spent on social media per day.

Juliet then asked the same participants to complete a questionnaire to rate how happy they were with their appearance, with a score of 0 being ‘very unhappy’ and 10 being ‘very happy’.

- (a) Define what is meant by a ‘structured interview’.
(1 mark)**
-
-

(continued on the next page)

Turn over

3 continued.

(continued on the next page)

3 continued.

**(b) Describe how Juliet could have used a random sampling technique for her investigation.
(2 marks)**

(continued on the next page)

Turn over

3 continued.

**(c) Identify the type of data Juliet gathered in her investigation.
(1 mark)**

(continued on the next page)

Turn over

3 continued.

Look at Table 3 for Question 3(d) in the Diagram Booklet.

The results of Juliet's investigation are shown in TABLE 3.

**(d) Calculate the mode for body image scores.
(1 mark)**

Mode _____

(continued on the next page)

Turn over

3 continued.

(e) Juliet concludes that there is a negative relationship between social media use and body image.

**Give ONE way Juliet's findings could support this conclusion.
(1 mark)**

(Total for Question 3 = 6 marks)

4 Jamie investigated whether personality influences obedience to an authority figure. He used a questionnaire with open-ended and closed-ended questions about personality traits and obedient behaviour.

**(a) Describe ONE reason why Jamie may have used open-ended questions in his investigation.
(2 marks)**

(continued on the next page)

Turn over

4 continued.

(continued on the next page)

4 continued.

**(b) State ONE ethical issue that
Jamie should have considered in
his investigation.
(1 mark)**

(continued on the next page)

Turn over

4 continued.

Jamie found that eight of his participants scored highly for authoritarian personality.

Look at Table 4 for Question 4(c) in the Diagram Booklet.

The number of obedient acts they had reported for the previous week are shown in TABLE 4.

**(c) Calculate the median score for the number of obedient acts reported by participants in TABLE 4.
(2 marks)**

Median _____

Turn over

4 continued.

- (d) Calculate the range for the number of obedient acts reported by the participants in TABLE 4.
(1 mark)**

Range _____

(Total for Question 4 = 6 marks)

- *5 Becker et al. (2002) conducted a natural experiment in Fiji to investigate the impact of television on eating behaviours. They assessed attitudes to eating in 1995, just as television was being introduced to the native population. They returned in 1998 to assess eating behaviours after three years of television exposure.**

63 girls with a mean age of 17·3 years took part in 1995. A second sample of 65 girls with a mean age of 16·9 years took part in 1998.

To score eating behaviours, the two samples of girls completed a standardised EAT-26 questionnaire. They also answered questions about television viewing. Their weight, height, and body mass index (BMI) were also recorded.

(continued on the next page)

5 continued.

Comparisons between 1995 and 1998 data indicated that, after exposure to western imagery on television, the reports of disordered eating such as self-induced vomiting to lose weight had increased.

**Evaluate the use of natural experiments to investigate human behaviour.
(12 marks)**

(continued on the next page)

Turn over

5 continued.

(continued on the next page)

Turn over

5 continued.

(continued on the next page)

5 continued.

(continued on the next page)

5 continued.

(continued on the next page)

5 continued.

(continued on the next page)

5 continued.

(continued on the next page)

5 continued.

(continued on the next page)

5 continued.

(continued on the next page)

5 continued.

(continued on the next page)

5 continued.

(Total for Question 5 = 12 marks)

TOTAL FOR SECTION A = 37 MARKS

Turn over

INSTRUCTIONS

Sections B to F – select TWO sections from B to F. Answer ALL questions in these sections.

Page Topic studied

**38 Section B: Criminal psychology –
Why do people become criminals?**

**58 Section C: The self – What makes you
who you are?**

**79 Section D: Perception – How do you
interpret the world around you?**

**99 Section E: Sleep and dreaming – Why
do you need to sleep and dream?**

**119 Section F: Language, thought and
communication – How do you
communicate with others?**

Turn over

SECTION B

Criminal psychology – Why do people become criminals?

If you have studied criminal psychology, then answer ALL questions in this section.

Write your answers in the spaces provided.

Some questions must be answered with a cross in a box ☒. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☒.

☐ **If you answer the questions in Section B put a cross in the box.**

6 Identify the sampling method used by Charlton et al. (2000) to select their sample of children.

☐ **A Systematic sampling**

☐ **B Stratified sampling**

☐ **C Volunteer sampling**

☐ **D Random sampling**

(Total for Question 6 = 1 mark)

**7 State what is meant by a
‘secondary reinforcer’.**

(Total for Question 7 = 1 mark)

8 Describe how vicarious reinforcement could lead to a person learning criminal behaviour.

(Total for Question 8 = 2 marks)

- 9 Liam was found guilty of vandalising a local community centre where he smashed windows and spray-painted graffiti on the walls. He has been given a community sentence.

**Explain how community sentencing could be used with Liam.
(2 marks)**

9 continued.

(Total for Question 9 = 2 marks)

10 Harriet was excluded from school for starting a fight during which she punched another girl and swore at a teacher. Jayne was watching Harriet. Two days later Jayne started a fight with her sister.

Explain ONE reason why Jayne may have started a fight with her sister.

**You must use social learning theory to justify your answer.
(2 marks)**

10 continued.

(Total for Question 10 = 2 marks)

- 11 Edward is 14 years old and has started behaving antisocially. He has been playing loud music in the park and swearing at staff in the local shop. Edward has been referred to a young offenders support worker.**

The support worker intends to only use positive punishment to help Edward with his behaviour.

**Explain ONE strength and ONE weakness of using positive punishment with Edward to improve his behaviour.
(4 marks)**

(begin your answer on the next page)

11 continued.

Strength

(continued on the next page)

11 continued.

Weakness

(Total for Question 11 = 4 marks)

***12 Jeff is 27 years old and lives with his wife and two children. He has committed a number of criminal offences over the last few years. These have included stealing, assault, driving a stolen vehicle and fraud.**

He has struggled to find a job due to his criminal record. His wife has a job in an office, so Jeff looks after the children.

Jeff was recently arrested for a robbery at a petrol station where he stole over £6000. He has been sentenced by the court to serve four years in prison.

**Assess how well prison could prevent Jeff from reoffending.
(9 marks)**

(continued on the next page)

Turn over

12 continued.

(continued on the next page)

12 continued.

(continued on the next page)

12 continued.

(continued on the next page)

12 continued.

(continued on the next page)

12 continued.

(continued on the next page)

12 continued.

(continued on the next page)

12 continued.

(continued on the next page)

12 continued.

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

(Total for Question 12 = 9 marks)

TOTAL FOR SECTION B = 21 MARKS

Turn over

SECTION C

The self – What makes you who you are?

If you have studied the self, then answer ALL questions in this section.

Write your answers in the spaces provided.

Some questions must be answered with a cross in a box ☒. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☒.

☐ **If you answer the questions in Section C put a cross in the box.**

13 Identify how many participants took part in the study by Van Houtte and Jarvis (1995).

☐ **A 130**

☐ **B 140**

☐ **C 150**

☐ **D 160**

(Total for Question 13 = 1 mark)

14 State what is meant by ‘congruence’.

(Total for Question 14 = 1 mark)

15 Describe how a belief in free will influences socially desirable behaviour.

(Total for Question 15 = 2 marks)

16 Beatrice and Karen are talking about different types of personality. Karen believes she is highly organised and in control because of her personality. Beatrice tells Karen that she can measure her personality to find out if this is true.

**Explain how Karen can use a personality scale to measure her personality.
(2 marks)**

16 continued.

(Total for Question 16 = 2 marks)

17 Phoebe has recently divorced from her husband, but they remain friends. She owns a successful business and is happy with her life, although she would like to give extra time to the charity she works with.

Explain ONE reason why Phoebe has yet to reach self-actualisation.

**You must use Maslow (1943) to justify your answer.
(2 marks)**

17 continued.

(Total for Question 17 = 2 marks)

- 18 George has completed Cattell's (1946) 16PF personality factor assessment. The results suggest that George is caring, relaxed, tough, and trusting.**

George agreed with some of the results, but he thought that the assessment was not completely correct.

**Explain ONE strength and ONE weakness of using Cattell's (1946) 16PF personality factor assessment to measure George's personality.
(4 marks)**

(begin your answer on the next page)

18 continued.

Strength

(continued on the next page)

18 continued.

Weakness

(Total for Question 18 = 4 marks)

Turn over

***19 Wilbur is a confident and happy teenager who often tries new things. He is keen to take part in activities and continues to try his best even if he is struggling to learn new things. His parents often say they are proud of him for trying his best and that they want him to be happy.**

His best friend, Oliver, is not as confident as Wilbur. Oliver does not try many new things, and often gets upset when he cannot do something. Oliver says he is going to be a doctor like his Dad. Oliver's parents say they are proud of his achievements and that they want him to do well.

**Assess how well positive regard (Rogers, 1951) can explain the behaviour of Wilbur and Oliver.
(9 marks)**

(begin your answer on the next page)

19 continued.

(continued on the next page)

Turn over

19 continued.

(continued on the next page)

Turn over

19 continued.

(continued on the next page)

Turn over

19 continued.

(continued on the next page)

Turn over

19 continued.

(continued on the next page)

Turn over

19 continued.

(continued on the next page)

Turn over

19 continued.

(continued on the next page)

Turn over

19 continued.

(continued on the next page)

Turn over

19 continued.

(Total for Question 19 = 9 marks)

TOTAL FOR SECTION C = 21 MARKS

SECTION D

Perception – How do you interpret the world around you?

If you have studied perception, then answer ALL questions in this section.

Write your answers in the spaces provided.

Some questions must be answered with a cross in a box ☒. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☒.

☐ **If you answer the questions in Section D put a cross in the box.**

20 Identify how many of the quadrants contained objects in the study by Haber and Levin (2001).

☐ **A 1**

☐ **B 2**

☐ **C 3**

☐ **D 4**

(Total for Question 20 = 1 mark)

21 State what is meant by 'stereopsis'.

(Total for Question 21 = 1 mark)

22 Describe how texture gradient gives the perception of distance.

(Total for Question 22 = 2 marks)

23 Malik is using a flight simulator video programme. When he is in the simulator, he can determine the direction and speed of his flight even though he is not physically moving.

The flight instructor says this is because the objects in the flight simulation video have been programmed to move through the visual field at different speeds.

Explain, using optic flow, why the objects are programmed to move at different speeds.

(2 marks)

(continued on the next page)

Turn over

23 continued.

(Total for Question 23 = 2 marks)

24 Jennifer entered her home-grown flowers into a local competition. She won first prize in the competition and was really pleased. When she returned home, she described the bright colours of the flowers and how pretty the flowers had been.

Explain ONE way that emotion could account for Jennifer's perception of the flowers.

**You must refer to a concept to justify your answer.
(2 marks)**

24 continued.

(Total for Question 24 = 2 marks)

25 Marigold was shown a visual illusion and asked to interpret what she perceived.

Look at Figure 1 for Question 25 in the Diagram Booklet. It shows the image Marigold saw.

Marigold said she could see two different images in the visual illusion.

**Explain TWO ways that Gregory's (1970) constructivist theory of perception could demonstrate why Marigold could perceive different images.
(4 marks)**

(begin your answer on the next page)

25 continued.

1 _____

(continued on the next page)

25 continued.

2

(Total for Question 25 = 4 marks)

- *26 Steven and Thomas were shown images of 10 ambiguous figures during a laboratory experiment. At each presentation of the image, a word for the image was read out. Steven and Thomas were read a different word for each image.**

Look at Figure 2 for Question 26 in the Diagram Booklet. It shows an example of an ambiguous figure and the words that were read to Steven and Thomas.

When they were asked to draw the images, some of the pictures that Steven and Thomas drew looked different to the original images they had been shown.

(continued on the next page)

26 continued.

**Assess how well Carmichael, Hogan and Walter (1932) can explain why Steven and Thomas produced drawings that were different to the ambiguous figures.
(9 marks)**

(continued on the next page)

Turn over

26 continued.

(continued on the next page)

26 continued.

(continued on the next page)

26 continued.

(continued on the next page)

26 continued.

(continued on the next page)

Turn over

26 continued.

(continued on the next page)

26 continued.

(continued on the next page)

26 continued.

(Total for Question 26 = 9 marks)

TOTAL FOR SECTION D = 21 MARKS

Turn over

SECTION E

Sleep and dreaming – Why do you need to sleep and dream?

If you have studied sleep and dreaming, then answer ALL questions in this section.

Write your answers in the spaces provided.

Some questions must be answered with a cross in a box ☒. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☒.

☐ **If you answer the questions in Section E put a cross in the box.**

27 Identify the range of the sleep-wake cycles experienced by Siffre (1975) during his time in a cave.

- ☐ **A Approximately 18 to $24\frac{3}{4}$ hours**
- ☐ **B Approximately 18 to $51\frac{3}{4}$ hours**
- ☐ **C Approximately 24 to $36\frac{3}{4}$ hours**
- ☐ **D Approximately 24 to $51\frac{3}{4}$ hours**

(Total for Question 27 = 1 mark)

28 State what is meant by the ‘latent content’ of dreams.

(Total for Question 28 = 1 mark)

29 Describe the effect of light on the sleep-wake cycle.

(Total for Question 29 = 2 marks)

30 Duncan sometimes falls asleep suddenly during the day when he should be awake. There are times when he can feel very drowsy and needs regular naps to help him manage his drowsiness. Duncan can sometimes lose control of his muscles, which can make him collapse.

**Explain ONE sleep disorder that can account for the symptoms Duncan is experiencing.
(2 marks)**

30 continued.

(Total for Question 30 = 2 marks)

31 Betty used a new sleep monitoring app on her smartwatch to record her sleep cycle. At several different points during the night when Betty was asleep, her app recorded an increase in the activity in her brain and a decrease in her physical movement.

Explain ONE reason why Betty's brain activity showed increases while she was asleep.

**You must use a theory to justify your answer.
(2 marks)**

31 continued.

(Total for Question 31 = 2 marks)

32 Barbara is a therapist who analyses people's dreams. Amy goes to see Barbara to help her understand her dreams. Amy dreams that her parents have abandoned her in a shop, which causes her to feel alone and afraid.

Barbara believes that the dreams represent Amy's fear of living independently for the first time, as she has just moved into a new flat away from her family home.

**Explain TWO ways that the case study of 'Little Hans' (Freud, 1909) can support Barbara's belief that the dreams represent Amy's fears.
(4 marks)**

(begin your answer on the next page)

32 continued.

1 _____

(continued on the next page)

32 continued.

2 _____

(Total for Question 32 = 4 marks)

***33 Basil is having problems with sleeping. He is finding it difficult to go to sleep at night and struggling to wake in the morning. Basil visited his doctor who tested the functioning of his pineal gland. The doctor also thought that Basil may have problems with the hormone levels that affect sleep.**

Basil was given medication that helps regulate sleep hormones. When Basil takes the medication, he finds he can get to sleep better but he still finds it hard to wake up in the morning.

**Assess how well hormones can explain the problems Basil has with sleeping.
(9 marks)**

(continued on the next page)

Turn over

33 continued.

(continued on the next page)

Turn over

33 continued.

(continued on the next page)

Turn over

33 continued.

(continued on the next page)

Turn over

33 continued.

(continued on the next page)

Turn over

33 continued.

(continued on the next page)

Turn over

33 continued.

(continued on the next page)

Turn over

33 continued.

(continued on the next page)

Turn over

33 continued.

[illegible]

(Total for Question 33 = 9 marks)

TOTAL FOR SECTION E = 21 MARKS

Turn over

SECTION F

Language, thought and communication – How do you communicate with others?

If you have studied language, thought and communication, then answer ALL questions in this section.

Write your answers in the spaces provided.

Some questions must be answered with a cross in a box ☒. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☒.

☐ **If you answer the questions in Section F put a cross in the box.**

34 Identify the number of Japanese participants in the study by Yuki et al. (2007).

☐ **A 72**

☐ **B 85**

☐ **C 95**

☐ **D 118**

(Total for Question 34 = 1 mark)

35 State what is meant by ‘facial expressions’ as a form of non-verbal communication.

(Total for Question 35 = 1 mark)

36 Describe proxemics when communicating with close friends.

(Total for Question 36 = 2 marks)

37 Ivan is taking art lessons at his local community centre. The instructor suggests that Ivan should use more shades of blue in his painting of the sea and gives Ivan some suggestions, including aqua, turquoise, azure and sky.

Ivan does not know what these colours are as he considers the colour blue to be either light blue or dark blue.

Explain, using linguistic relativism, ONE reason why Ivan may not know the different shades of blue.

(2 marks)

(begin your answer on the next page)

37 continued.

(Total for Question 37 = 2 marks)

38 Ernie is arranging a business meeting with a company in a different country. He suggests they meet on a Tuesday, however the other company say they would prefer to meet on a day behind Tuesday and suggest Monday instead.

Explain ONE reason why the two companies discuss their meeting time differently.

**You must use a study to justify your answer.
(2 marks)**

(continued on the next page)

Turn over

38 continued.

(Total for Question 38 = 2 marks)

39 Marshall visited the local zoo and went to see the primates. When he was at the primate enclosure, he saw a baby chimpanzee looking at its mother and pulling at her fur. The mother responded by stroking her baby chimpanzee and then feeding him.

A second chimpanzee began to approach the mother and baby, and the mother bared her teeth and made a screeching noise at the approaching chimpanzee, which turned and went away.

Explain TWO reasons for the communication shown by the chimpanzees at the zoo.

**You must use Darwin's (1872) theory of evolution to justify your answer.
(4 marks)**

(begin your answer on the next page)

Turn over

39 continued.

1 _____

(continued on the next page)

Turn over

39 continued.

2 _____

(Total for Question 39 = 4 marks)

***40 Anton is 18 months old and is learning to talk. He has started to name some objects when he sees them, such as 'teddy' and 'car'. Anton cannot name objects he is unfamiliar with. So, when his mother showed him a kettle, Anton was unable to say what it was. Anton can say the word 'mine' and he uses this word for all objects that he picks up.**

When Anton's mum is talking to him, Anton smiles at her and often responds with random words. His mum asked Anton if he wanted custard with his cake, but Anton responded with the word 'car'.

(continued on the next page)

40 continued.

**Assess how well Piaget (1950) can
explain the language development
of Anton.
(9 marks)**

(continued on the next page)

Turn over

40 continued.

(continued on the next page)

Turn over

40 continued.

(continued on the next page)

Turn over

40 continued.

(continued on the next page)

Turn over

40 continued.

(continued on the next page)

Turn over

40 continued.

(continued on the next page)

40 continued.

(continued on the next page)

Turn over

40 continued.

(continued on the next page)

Turn over

40 continued.

(Total for Question 40 = 9 marks)

TOTAL FOR SECTION F = 21 MARKS

TOTAL FOR PAPER = 79 MARKS

END OF PAPER