Please write clearly in block capitals.

Centre number | | | | | | Candidate number | | | | |

Surname _____

Forename(s) _____

Candidate signature _____
I declare this is my own work.

GCSE
PSYCHOLOGY

Paper 1 Cognition and Behaviour

Thursday 21 May 2020 Afternoon Time allowed: 1 hour 45 minutes

Materials
For this paper you may use:
- a calculator.

Instructions
- Use black ink or black ball-point pen.
- Fill in the boxes at the top of this page.
- Answer **all** questions.
- You must answer the questions in the spaces provided. Do not write outside the box around each page or 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.

For Examiner's Use	
Section	Mark
A	
B	
C	
D	
TOTAL	

Information
- The marks for questions are shown in brackets.
- The maximum mark for this paper is 100.
- Question 19 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.

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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.

0 1 Which is the **best** example of information that would be stored as procedural memory?

Shade **one** box.

[1 mark]

A How many millilitres there are in a litre. ⬭

B How to play a piece of music on the piano. ⬭

C The colours used in the Italian flag. ⬭

D What happened on your first day at secondary school. ⬭

0 2 Which of the following statements about short-term memory (STM) is true?

Shade **one** box.

[1 mark]

A STM can hold information for up to 30 seconds. ⬭

B STM can store approximately 15 pieces of information. ⬭

C STM transfers information to long-term memory through attention. ⬭

D STM usually encodes information semantically. ⬭

Do not write outside the box

0 3 Evaluate the multi-store model of memory.

[5 marks]

Turn over for the next question

Do not write outside the box

0 4 Describe Bartlett's 'War of the Ghosts' study.

[4 marks]

Do not write outside the box

0 5 Read the following information.

> A police officer is reading the statements of two eyewitnesses. Both statements describe the same robbery committed by one person in a local shop.
>
> The first eyewitness described the robber as being a male, in his late teens, wearing a red hoodie and not carrying a weapon.
>
> The second eyewitness described the robber as being a male with a facial scar, in his late-twenties, wearing a red T-shirt and carrying a knife.

Use your knowledge of the theory of reconstructive memory to explain why each eyewitness gave different descriptions of the same robber.

[6 marks]

Turn over for the next question

Do not write outside the box

0 6 Explain **one** weakness of the reconstructive theory of memory.

[2 marks]

Do not write outside the box

0 7 You have been asked to investigate the effect of context on the accuracy of memory.

Describe how you would design an experiment to do this.

You need to include the following information in your answer:

- what you would ask participants to do and what data you would collect
- one extraneous variable that could affect your results and how you could control it
- the results you would expect to find from your experiment.

[6 marks]

25

Turn over for Section B

Do not write outside the box

Section B

Perception

Answer **all** questions in the spaces provided.

0 8 Which **two** of the following are binocular depth cues?

Shade **two** boxes.

[2 marks]

A Convergence ⬭

B Height in plane ⬭

C Linear perspective ⬭

D Relative size ⬭

E Retinal disparity ⬭

0 9 Which is the **best** explanation for the visual illusion known as the Ames room?

Shade **one** box.

[1 mark]

A Ambiguity ⬭

B Fiction ⬭

C Occlusion ⬭

D Size constancy ⬭

Do not write outside the box

1 0 Briefly evaluate Gibson's direct theory of perception.

[4 marks]

1 1 . 1 Sketch the Müller-Lyer illusion.

[1 mark]

Do not write outside the box

1 1 . 2 Outline how psychologists would explain the Müller-Lyer illusion.

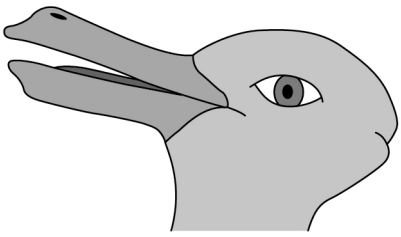
[3 marks]

1 2 Read the following information.

A teacher carried out an experiment to investigate factors that can affect perception.
She divided her class into two groups: A and B.
Group A was shown nine different pictures of rabbits.
Group B was shown nine different pictures of ducks.

Both groups were then shown **Figure 1** and were asked what animal they saw.

Figure 1



The results are shown in **Table 1**.

Table 1: The type of animal seen by participants

Animal	Group A	Group B
Rabbit	11	2
Duck	3	13
Other	1	0

Do not write outside the box

1 2 . 1 Calculate the percentage of students in Group B who saw **Figure 1** as a rabbit.

State your answer using **two** significant figures **and** show your workings.

[3 marks]

Workings:

Answer _____

1 2 . 2 Which of the following is the correct fraction of Group A who saw **Figure 1** as a duck?

Shade **one** box.

[1 mark]

A 1/3 ⬭

B 1/4 ⬭

C 1/5 ⬭

D 1/6 ⬭

Question 12 continues on the next page

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1 2 . 3 Use your knowledge of **one** factor that affects perception to explain the results shown in **Table 1** (on page 10).

[4 marks]

Do not write outside the box

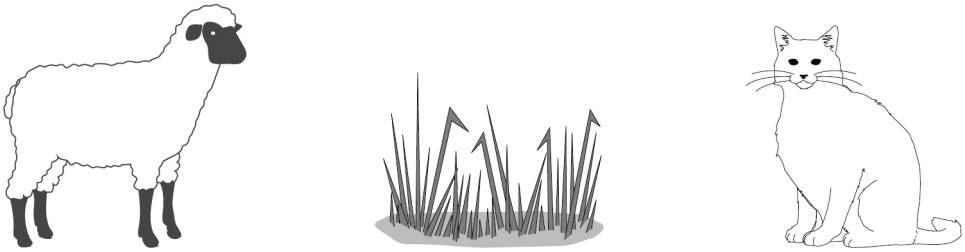
1 3

A psychologist carried out a laboratory experiment to see whether or not culture affects perception. He asked Marc and José to look at the three images shown in **Figure 2** and decide which image was the odd one out.

Marc was brought up on a farm and still lives in a rural part of France. Marc said, "The cat is the odd one out. The sheep and the grass go together best because sheep eat grass."

José was brought up in the Spanish city where he still lives. "No!" said José, "it's the grass. The cat and the sheep go together best because they are both animals."

Figure 2



Sheep Grass Cat

Outline how culture can affect perception. Refer to **both** Marc **and** José's comments in your answer.

[4 marks]

Do not write outside the box

1 4 Explain **one** strength of using laboratory experiments in research.

[2 marks]

25

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Section C

Development

Answer **all** questions in the spaces provided.

1 5 Sienna is planning her holiday. Which part of the brain plays a key role in this activity?

Shade **one** box only.

[1 mark]

A Brain stem ⬭

B Cerebellum ⬭

C Cortex ⬭

D Thalamus ⬭

1 6 Matt is looking at a drawing of how castles were designed. Which **one** of the following learning styles is he using?

Shade **one** box only.

[1 mark]

A Fixed ⬭

B Growth ⬭

C Verbaliser ⬭

D Visualiser ⬭

Turn over for the next question

Do not write outside the box

1 7 According to Piaget's theory of cognitive development, during which stage will a child first start to look for something that has been hidden from view?

Shade **one** box only.

[1 mark]

A Concrete operational ⬭

B Formal operational ⬭

C Pre-operational ⬭

D Sensorimotor ⬭

1 8

Two teachers are having a conversation about a student.

Mr Taylor: "I am really worried about Jana. She is not enthusiastic about learning during lessons and does not complete her homework. Her test scores are getting worse. What can I do to help her?"

Mr Rogers: "Maybe you need to increase Jana's level of self-efficacy."

1 8 . 1 Outline **one** example of how Mr Taylor can use praise to improve Jana's learning.

[2 marks]

1 8 . 2 Outline **one** example of how Mr Taylor can increase Jana's self-efficacy.

[2 marks]

Do not write outside the box

1 9 Read the following information.

Mason and Kyle had a trial for the school football team but were not selected to play.

Mason: "I'm such a loser. I never get chosen for anything. There is no point going to training. The coach obviously doesn't like me. There's always going to be someone more talented than me, it's so unfair."

Kyle: "I am disappointed too but everyone gets rejected sometimes. The coach says I need to improve my fitness level so I am going to start running twice a week. Perhaps I will be selected next time."

Use your knowledge of **both** negative schemas as an explanation for depression **and** Dweck's Mindset theory of learning to explain why these two students responded in different ways.

Briefly evaluate **both** negative schemas as an explanation for depression **and** Dweck's Mindset theory.

[9 marks]

Do not write outside the box

Do not write outside the box

2 0 Hughes investigated egocentrism in his 'policeman doll study'. Describe this study.

[4 marks]

Turn over for the next question

Do not write outside the box

2 1 Evaluate Hughes' 'policeman doll study'.

[5 marks]

25

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Section D

Research Methods

Answer **all** questions in the spaces provided.

2 2 Which **two** of the following are commonly understood to be advantages of case studies?

Shade **two** boxes.

[2 marks]

A The conclusions drawn are objective. ⬭

B The findings can be easily generalised to the behaviour of other people. ⬭

C They are easy for others to replicate. ⬭

D They can be used to study rare and unusual behaviours. ⬭

E They provide rich and detailed information. ⬭

2 3 Which **one** of the following statistics is calculated by finding the difference between the smallest and largest values in a set of data?

Shade **one** box only.

[1 mark]

A Mean ⬭

B Median ⬭

C Mode ⬭

D Range ⬭

Turn over for the next question

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2 4 Outline what is meant by independent groups **and** repeated measures.

Discuss the strengths and weaknesses of **both** of these types of experimental design.

[9 marks]

Do not write outside the box

Turn over for the next question

Do not write outside the box

2 5 Read the following information.

A researcher wanted to investigate whether physical exercise affected the mental well-being of firefighters.

He used stratified sampling to select 10 participants from a local fire department. He asked each participant to keep a diary for one month. Participants were asked to record the amount of exercise they completed each day. They were also asked to record a daily mental well-being score using the scale shown in **Table 2**.

Table 2: Mental well-being rating scale

Over the past day	**All of the time**	**Often**	**Some of the time**	**Rarely**	**None of the time**
I have felt confident.	5	4	3	2	1
I have felt relaxed.	5	4	3	2	1
I have dealt with problems well.	5	4	3	2	1
I have felt cheerful.	5	4	3	2	1

Total score: _____

2 5 . 1 Outline **one** strength of using a stratified sample when conducting research.

[2 marks]

_____

_____

_____

_____

2 5 . 2 Give a definition of **both** qualitative **and** quantitative data.

[2 marks]

Qualitative data _____

_____

Quantitative data _____

_____

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2 5 . 3 When collecting information about mental well-being, explain why collecting qualitative data rather than quantitative data may increase the validity of the data collected by the researcher.

[2 marks]

Question 25 continues on the next page

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2 5 . 4 Read the following information.

At the end of the month, the researcher analysed the diaries completed by participants. He calculated the average number of minutes each participant exercised daily and the average mental well-being score for each participant for the whole month. The results are shown in **Table 3**.

Table 3: The average daily exercise and mental well-being score for each participant

Participant number	Average daily exercise (minutes)	Average mental well-being score
1	30	14
2	12	11
3	5	8
4	2	7
5	8	10
6	14	10
7	30	12
8	15	11
9	28	15
10	45	15

Identify the mode for the average daily exercise scores shown in **Table 3**.

[1 mark]

Mode for average daily exercise = _____

2 5 . 5 Calculate the median for the average mental well-being scores shown in **Table 3**.

[1 mark]

Median for average daily exercise = _____

Do not write outside the box

2 5 . 6 Use the graph paper to sketch a scatter diagram to show the results shown in **Table 3**.

Provide a suitable title and labels for your diagram.

[4 marks]

2 5 . 7 Identify the type of correlation the researcher has found between exercise and mental well-being.

Shade **one** box only.

[1 mark]

A Negative correlation ⬭

B No correlation ⬭

C Perfect correlation ⬭

D Positive correlation ⬭

25

END OF QUESTIONS

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