GCSE
PSYCHOLOGY
Paper 1  Cognition and behaviour

Specimen  Time allowed: 1 hour 45 minutes

Materials
For this paper you may have:
• a calculator.

Instructions
• Use black ink or black ball-point pen.
• Fill in the boxes at the bottom 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.
• 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.
• 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.
Section A
Memory

Answer all questions in the spaces provided.

Only one answer per question is allowed.

For each answer 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. [X]

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

01.1 Which one of these is a description of retrieval? Shade one box only.

A Changing information so that it can be stored in memory

B Forgetting information

C Holding information in memory

D Recalling information

[1 mark]

01.2 Which one of these is a description of episodic memory? Shade one box only.

A A memory of a personal experience

B A memory that lasts for a few seconds

C Remembering factual information

D Remembering how to do something

[1 mark]
You have been asked to conduct an experiment to investigate the effects of serial position when learning a list of words. Describe how you would conduct this experiment.

You need to include:

- the experimental design you would choose, and why this would be suitable
- the task participants would be required to do and the data that you would collect
- the results you would expect to find from your experiment.

[6 marks]
03.1 Identify one factor that has been shown to affect the accuracy of memory. [1 mark]

03.2 Use your knowledge of psychology to describe how the factor you have identified in question 03.1 affects the accuracy of memory. [3 marks]

04 Briefly discuss two criticisms of research into factors that affect the accuracy of memory. [4 marks]
Tim came home from school and said to his Mum:

‘In our lesson today, the teacher read out a story called the War of the Ghosts. Then we all had to write down what we could remember of the story. It was very difficult. I wrote that the two boys went fishing in a fishing boat, but really one of them went to a battle in a canoe!!’

Discuss what Bartlett’s theory and research into reconstructive memory and at least one theory of language and thought tell us about the possible relationship between language and thought. Refer to Tim’s conversation with his mother as part of your answer.

[9 marks]
Section B
Perception

Answer all questions in the spaces provided.

06.1 Sally touches a piece of material and can feel it is soft like cotton wool. Which process does this demonstrate? Shade one box only.

A Expectation
B Motivation
C Perceptual set
D Sensation

[1 mark]

06.2 Which is the best explanation for the visual illusion known as Rubin’s vase? Shade one box only.

A Ambiguity
B Convergence
C Misinterpreted depth cues
D Size constancy

[1 mark]
What is meant by ‘perception’? [2 marks]

Figure 1

Briefly outline two of the monocular depth cues shown in Figure 1. Explain how each cue you have identified helps us to perceive the distance of objects in this image. [4 marks]

Cue 1

Cue 2
09.1 Identify one binocular depth cue. [1 mark]

09.2 Explain how the binocular depth cue you have identified in question 09.1 helps us to perceive how far away objects are. [2 marks]

10 Describe Gregory’s constructivist theory of perception. [4 marks]
Gregory’s constructivist theory of perception has been criticised. Use your knowledge of psychology to evaluate Gregory’s theory.

[5 marks]
A researcher conducted a study into perception. In condition A, participants were shown a series of letters. Then they were asked to identify the image shown in Figure 4.

In condition B, participants were shown a series of numbers. Then they were also asked to identify the image shown in Figure 4.

The researcher recorded whether the image was identified as a number or a letter.

**Table 1:** The percentage of participants who identified the image as a number or a letter.

<table>
<thead>
<tr>
<th></th>
<th>Condition A</th>
<th>Condition B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Image identified as a number</td>
<td>27%</td>
<td>82%</td>
</tr>
<tr>
<td>Image identified as a letter</td>
<td>73%</td>
<td>18%</td>
</tr>
</tbody>
</table>

Use your knowledge of types of data to explain why the data is collected in this study is an example of primary data.

[2 marks]
12. Use your knowledge of factors affecting perception to draw a conclusion from the results shown in Table 1. Explain your answer.

[3 marks]

Turn over for the next section
Section C
Development
Answer all questions in the spaces provided.

1.3 Which of the following describes one feature that is usually present by the end of Piaget’s sensorimotor stage of development. Shade one box only.

A the child thinks in an abstract way 
B the child understands objects exist when they are out of sight
C the child understands things are the same even if they look different
D the child understands things from a different point of view

[1 mark]

Read the item and then answer the questions that follow.

Nadine is talking about her son, Mikey.

‘Mikey can’t understand that there is the same amount of orange juice in his short beaker as in his sister’s tall cup. He gets very cross, saying that she has more juice than him. This happens even if I open two identical cartons in front of him and pour one into his beaker and the other into his sister’s cup.’

1.4 What is Mikey’s likely age?

[1 mark]
14.2 How can Piaget's theory of cognitive development be used to explain Mikey's behaviour?

[6 marks]

14.3 Give two ways in which Piaget's theory of cognitive development could be applied to education and support each way you have given with an example that could be used in the classroom.

[4 marks]

1

2
Identify and explain one criticism of Piaget's theory of cognitive development.
Read the item and then answer the questions that follow.

Two students were discussing their progress in GCSE Maths.

Lizzie  ‘It’s fine for you. You were born good at Maths. I wasn’t and I will never be able to do it. There’s no point trying.’

Ben    ‘You’re so wrong. I wasn’t any good at first, but I’ve worked and worked in Maths. That’s why I can cope now. It’s been years of hard work!’

Outline and evaluate Dweck’s Mindset theory of learning. Refer to the conversation between Lizzie and Ben in your answer.  

[9 marks]

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Turn over
Section D

Research Methods

Answer all questions in the spaces provided.

Read the item and then answer the questions that follow.

A psychologist conducted a memory experiment, showing people sets of numbers and then taking the numbers away and asking them to write down what they had seen.

- In Condition A, participants saw nine numbers written in groups of three for 10 seconds, for example, 746 826 392. They were then given 10 seconds to write down the numbers they had seen. This was repeated 10 times with different sets of numbers.

- In Condition B, the same participants saw nine numbers written in one group of nine for 10 seconds; for example, 746826392. The participants were given ten seconds to write down the numbers they had seen. This was repeated 10 times with different sets of numbers.

The psychologist recorded the total number of recall errors made by each participant.

16.1 What is an independent variable? [1 mark]

16.2 What is a dependent variable? [1 mark]
16.3 Write a suitable hypothesis for this experiment.

[2 marks]

Read the item and then answer the questions that follow.

The target population for this experiment was workers at a call centre. There were more than 100 workers at the centre. The psychologist selected 10 participants, using systematic sampling.

17.1 Describe how the psychologist could have used systematic sampling to select 10 participants.

[3 marks]

Question 17 continues on the next page
The results of the experiment are shown in Table 2 below.

**Table 2:** Total number of errors made by participants in Condition A and Condition B.

<table>
<thead>
<tr>
<th>Participant number</th>
<th>Condition A</th>
<th>Condition B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>3</td>
<td>6</td>
<td>9</td>
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<td>4</td>
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<td>12</td>
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<td>8</td>
<td>4</td>
<td>11</td>
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<tr>
<td>9</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>10</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td></td>
</tr>
</tbody>
</table>

The mean number of errors for Condition A is 5. Calculate the mean number of errors for Condition B. Show your workings.

[2 marks]

Workings:

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Answer
The range for Condition A is 6. Calculate the range for Condition B. Show your workings. [2 marks]

Workings:

Answer

Using the means and the ranges, what conclusions could the psychologist draw from this experiment? Explain your answer. [6 marks]

Turn over for the next question
A teacher asked her students to record how long they spent on social media and how long they spent reading for pleasure over a 14 day period. This is what she found.

**Table 3: Table to show the time spent on social media and the time spent reading for pleasure**

<table>
<thead>
<tr>
<th>Participant number</th>
<th>Variable A (hours on social media)</th>
<th>Variable B (hours reading for pleasure)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>18</td>
</tr>
<tr>
<td>2</td>
<td>16</td>
<td>7</td>
</tr>
<tr>
<td>3</td>
<td>14</td>
<td>9</td>
</tr>
<tr>
<td>4</td>
<td>6</td>
<td>17</td>
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<td>5</td>
<td>10</td>
<td>11</td>
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<tr>
<td>6</td>
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<td>7</td>
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<td>8</td>
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<td>10</td>
</tr>
<tr>
<td>9</td>
<td>17</td>
<td>5</td>
</tr>
<tr>
<td>10</td>
<td>7</td>
<td>15</td>
</tr>
</tbody>
</table>
18.1 Use the graph paper below to sketch a scatter diagram of the results shown in Table 3.

Provide a suitable title and labels for your diagram.

[4 marks]

18.2 Identify the type of correlation the teacher found. Shade one box only.

A Negative correlation

B No correlation

C Perfect correlation

D Positive correlation

[1 mark]
Outline what is meant by qualitative and quantitative methods in psychology and explain one difference between these methods.

[3 marks]
There are no questions printed on this page