## OXFORD

INTERNATIONAL AQA EXAMINATIONS

Please write clearly in block capitals.

Centre number |  |  |  |  |  |
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Candidate number


Surname
Forename(s)
Candidate signature $\qquad$

## INTERNATIONAL A-LEVEL PSYCHOLOGY

## UNIT 2 BIOPSYCHOLOGY, DEVELOPMENT AND RESEARCH METHODS

## Specimen 2018

Morning Time allowed: 1 hour 30 minutes

## Materials

For this paper you must have:

- a calculator, which you are expected to use where appropriate.


## Instructions

- Use black ink or black ball-point pen.
- Fill in the boxes at the top of the 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.

- All working must be shown.
- 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 90 .
- You may use a bilingual dictionary.
- You may not use an English dictionary.


## Advice

For the multiple-choice questions, completely fill in the circle alongside the correct answer.
For each answer completely fill in the circle alongside the appropriate answer.
Only one answer per question is allowed.
CORRECT METHOD
WRONG METHODS
$\otimes \odot \otimes$

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.

| For Examiner's Use |  |
| :---: | :---: |
| Question | Mark |
| 1 |  |
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| 15 |  |
| 16 |  |
| TOTAL |  |


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| Answer all questions in the spaces provided |  |
| $\mathbf{0} \mathbf{1}$ | Figure 1 shows the left hemisphere of the human brain. Six areas of <br> cortical specialisation are labelled $\mathbf{A}, \mathbf{B}, \mathbf{C}, \mathbf{D}, \mathbf{E}$ and $\mathbf{F}$. |

Use your knowledge of localisation of function in the brain to identify the centres or areas of the brain named below.
In each case, match the named area with the appropriate label (A-F) from Figure 1. Shade one box only for each area.

| 0 | 1 | 1 |
| :--- | :--- | :--- |


| $\mathbf{A}$ | 0 | $\mathbf{B}$ | 0 | $\mathbf{C}$ | 0 | $\mathbf{D}$ | 0 | $\mathbf{E}$ | 0 | $\mathbf{F}$ | 0 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| $\mathbf{0}$ | $\mathbf{1}$. | $\mathbf{2}$ Somatosensory cortex |
| :--- | :--- | :--- |


| A | $\bigcirc$ | B | $\bigcirc$ | C | $\bigcirc$ | D | $\bigcirc$ | E | O | F | $\bigcirc$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
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| $\mathbf{0}$ | $\mathbf{1} \cdot \mathbf{3}$ Visual cortex |
| :--- | :--- | :--- |


| $\mathbf{A}$ | 0 | $\mathbf{B}$ | 0 | $\mathbf{C}$ | 0 | $\mathbf{D}$ | 0 | $\mathbf{E}$ | 0 | F | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |


| $\mathbf{0}$ | $\mathbf{1}$ | $\mathbf{4}$ Wernicke's area |
| :--- | :--- | :--- | :--- |


| $\mathbf{A}$ | $\bigcirc$ | $\mathbf{B}$ | $\bigcirc$ | $\mathbf{C}$ | $\bigcirc$ | $\mathbf{D}$ | $\bigcirc$ | $\mathbf{E}$ | 0 | F | 0 |
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| 0 | 1 | 5 | Motor cortex |
| :--- | :--- | :--- | :--- | :--- |


| $\mathbf{A}$ | 0 | $\mathbf{B}$ | 0 | $\mathbf{C}$ | 0 | $\mathbf{D}$ | 0 | $\mathbf{E}$ | 0 | F | 0 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{1 1}$ mark] |  |  |  |  |  |  |  |  |  |  |  |


| $\mathbf{0}$ | $\mathbf{2} \quad$ Below is a diagram of a sensory neuron (Figure 2). Name the structures |
| :--- | :--- | :--- | labelled a-d. Write the name of each structure in the box provided.

Figure 2

## Sensory Neuron


b)

[4 marks]

| $\mathbf{0}$ | $\mathbf{3}$ Identify two other types of neuron. Briefly describe the function of each type. |
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| $\mathbf{0}$ | $\mathbf{4} \quad$ Read the item and answer the question that follows |
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Amir gets nervous on the day of his driving test. In the morning, his mouth is dry and he cannot eat. Just before the test, his hands are all sticky as he starts to sweat. After the test, he feels hungry and tired.

Use your knowledge of the autonomic nervous system to explain Amir's experience.
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| $\mathbf{0}$ | $\mathbf{5} \quad$ Describe split brain research. |
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## Section B: Development

Answer all questions in the spaces provided.

| $\mathbf{0}$ | 6 | Outline the procedure involved in the Sally-Anne studies of theory of mind. |
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| $\mathbf{0}$ | $\mathbf{7} \quad$ Read the item and answer the question that follows. |
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A psychologist carried out an experiment to investigate scaffolding. She used two groups of children. All children were given the same problem to solve.
Each child in Group A solved the problem alone. Each child in Group B was given scaffolding by an older child as they solved the problem.

The findings are shown in Table 1 below.
Table 1:The number of children in each group who solved the problem correctly and incorrectly.

|  | Group A <br> Solved alone | Group B <br> Scaffolded |
| :--- | :---: | :---: |
| Correct answer | 2 | 9 |
| Incorrect answer | 8 | 1 |

Interpret the findings in Table 1. Refer to scaffolding in your answer.
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| $\mathbf{0}$ | $\mathbf{8}$ Read the item and answer the question that follows. |
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Fatima is a teacher. In some lessons she gives the children practical problems to solve and encourages the children to find out the answers for themselves. She thinks that young children can sometimes learn better that way.

Describe and evaluate Piaget's theory of cognitive development. Briefly refer to Fatima's lessons in your answer.
[20 marks]
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## Section C Research: Methods 1

Answer all questions in the spaces provided.

Read the item and answer the question that follows.

A psychologist investigated differences in language ability between 5-year-old boys and 5-year-old girls.
Ten girls and ten boys were selected from a local school. The children were chosen to take part by their teacher.
To assess each child's language ability, the psychologist used a 10-minute test. A high score on the test indicated good language ability and a low score on the test indicated poor language ability.

The results are shown in Table 2 below.
Table 2:The language ability scores for $\mathbf{1 0}$ girls and 10 boys

| Girls' scores | Boys' scores |
| :---: | :---: |
| 46 | 52 |
| 58 | 32 |
| 90 | 51 |
| 41 | 86 |
| 52 | 42 |
| 73 | 62 |
| 81 | 47 |
| 79 | 65 |
| 47 | 70 |
| 82 | 48 |
| Mean for girls $=64.9$ |  |
| Range for girls $=49.0$ |  |

Calculate the mean language ability score and the range for boys. Show your workings.

Boys' mean score $\qquad$
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$\qquad$
Boys' range

Explain why the psychologist chose to calculate the means and ranges in this study rather than just consider the individual scores.
[4 marks]
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1 1 1 What is the independent variable (IV) in this study?

A Age of child $\square$
B Language ability
C Sex of participant
D Type of test $\square$

| 1 | 2 |
| :--- | :--- | What is the operationalised dependent variable (DV) in this study.

A Language ability
B Language test score
C Sex of participant
D Time taken to complete the test

| $\mathbf{1}$ | $\mathbf{3}$ | The children's own teacher selected them to take part in the study. Explain one |
| :--- | :--- | :--- | problem with selecting the children in this way.

[4 marks]
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| 1 | 4 |
| :--- | :--- | Explain how the psychologist could have used random sampling in this study.

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| 1 | 5 | Explain two ethical issues that the psychologist should have considered in this |
| :--- | :--- | :--- | study.

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| 1 | 6 | The psychologist decided to carry out an unstructured interview with one of the |
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Discuss how carrying out an unstructured interview might lead to useful additional information in this case
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