OXFORD

INTERNATIONAL
AQA EXAMINATIONS

Please write clearly in block capitals.

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

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Forename(s) _____

Candidate signature _____

I declare this is my own work.

INTERNATIONAL AS
PSYCHOLOGY

Unit 2 Biopsychology, Development and Research Methods 1

Tuesday 17 January 2023 07:00 GMT Time allowed: 1 hour 30 minutes

Materials

For this paper you must have:
- a calculator, which you are expected to use where appropriate.

For Examiner's Use	
Section	Mark
A	
B	
C	
TOTAL	

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.
- All working must be shown.
- 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.

Information
- The marks for questions are shown in brackets.
- The maximum mark for this paper is 90.

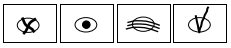
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Section A: Biopsychology

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

Only **one** answer per question is allowed.

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 Below are four statements about neurotransmitters.

Identify the **one** statement that is **incorrect**. Shade **one** box only.

[1 mark]

A Neurotransmitters affect nerve impulses in the nervous system. ⬭

B Neurotransmitters always produce an inhibitory response. ⬭

C Neurotransmitters diffuse across the synaptic gap. ⬭

D Neurotransmitters usually attach to the receptors of the post-synaptic neuron. ⬭

0 2 Localisation of function in the brain suggests specific brain areas are specialised for certain functions.

Briefly describe the function of the somatosensory cortex.

[2 marks]

Do not write outside the box

0 3 Outline possible effects of damage to Broca's area.

[3 marks]

Turn over for the next question

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0 4 Describe the function of the endocrine system.

[6 marks]

Do not write outside the box

0 5 Pavel is cooking dinner. He picks up a pan from the cooker. When he touches the hot handle, Pavel drops the pan.

Explain how sensory neurons, relay neurons and motor neurons would function in this situation.

[6 marks]

Do not write outside the box

0 6 Discuss split brain research.

[12 marks]

Do not write outside the box

Do not write outside the box

Extra space

30

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Section B: Cognitive Development

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

0 7 Ameeta is six months old. In a violation of expectation study Ameeta watched toy cars move along a track. As they moved along the track the cars passed behind a tall screen which had a window at the top. Ameeta watched two different cars moving along the track.

Condition 1: A small car moved along the track. It was not visible in the window.

Condition 2: A tall car moved along the track. Although it should have been visible through the window, it was not.

The researchers found that Ameeta looked much longer in Condition 2 than in Condition 1.

Explain why Ameeta spent much longer looking in Condition 2. Refer to Baillargeon's violation of expectation research in your answer.

[4 marks]

Turn over for the next question

Do not write outside the box

0 8 . 1 What is meant by theory of mind?

[2 marks]

0 8 . 2 Describe what researchers have found out about the theory of mind in the Sally-Anne studies.

[4 marks]

Do not write outside the box

0 9 Describe and evaluate Piaget's theory of cognitive development.

[20 marks]

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Do not write outside the box

Extra space

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Section C: Research Methods 1

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

A teacher read a report featuring a meta-analysis of smartphone use amongst teenagers. She decided to conduct her own research into the relationship between quality of sleep and smartphone use. The teacher told her class about her study and asked them if they would be willing to take part as participants. She gave every student a piece of paper and asked them to write down two pieces of information:

- A score out of 5 for the quality of their sleep on the previous night (a score of 1 = poor sleep and a score of 5 = excellent sleep).
- The total number of hours they had used their smartphone on the previous day.

1 0 What is meant by a meta-analysis?

[2 marks]

1 1 Write an appropriate non-directional hypothesis for the teacher's study.

[3 marks]

Do not write outside the box

1 2 Identify the sampling method the teacher used. Explain your answer.

[3 marks]

1 3 Briefly explain **one** problem with how the quality of sleep was measured in this study.

[2 marks]

Turn over for the next question

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1 4 Consent and confidentiality are two ethical issues.

Explain how the teacher could have obtained consent from her students **and** ensured confidentiality of their data.

[6 marks]

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Turn over for the next question

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ANSWER IN THE SPACES PROVIDED

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The teacher collected her participants' results and put them into **Table 1**:

Table 1: Quality of sleep score and smartphone use (hours)

Participant	Quality of sleep score (1–5)	Hours of smartphone use
1	3	3
2	4	2
3	1	5
4	4	4
5	3	4
6	4	3
7	5	2
8	2	6

1 5 The teacher wanted to calculate a measure of central tendency for smartphone use. Briefly explain why the mode would not be an appropriate measure of central tendency for this data.

[2 marks]

The teacher then decided to plot her data on a scattergram.

1 6 Explain what is meant by a scattergram.

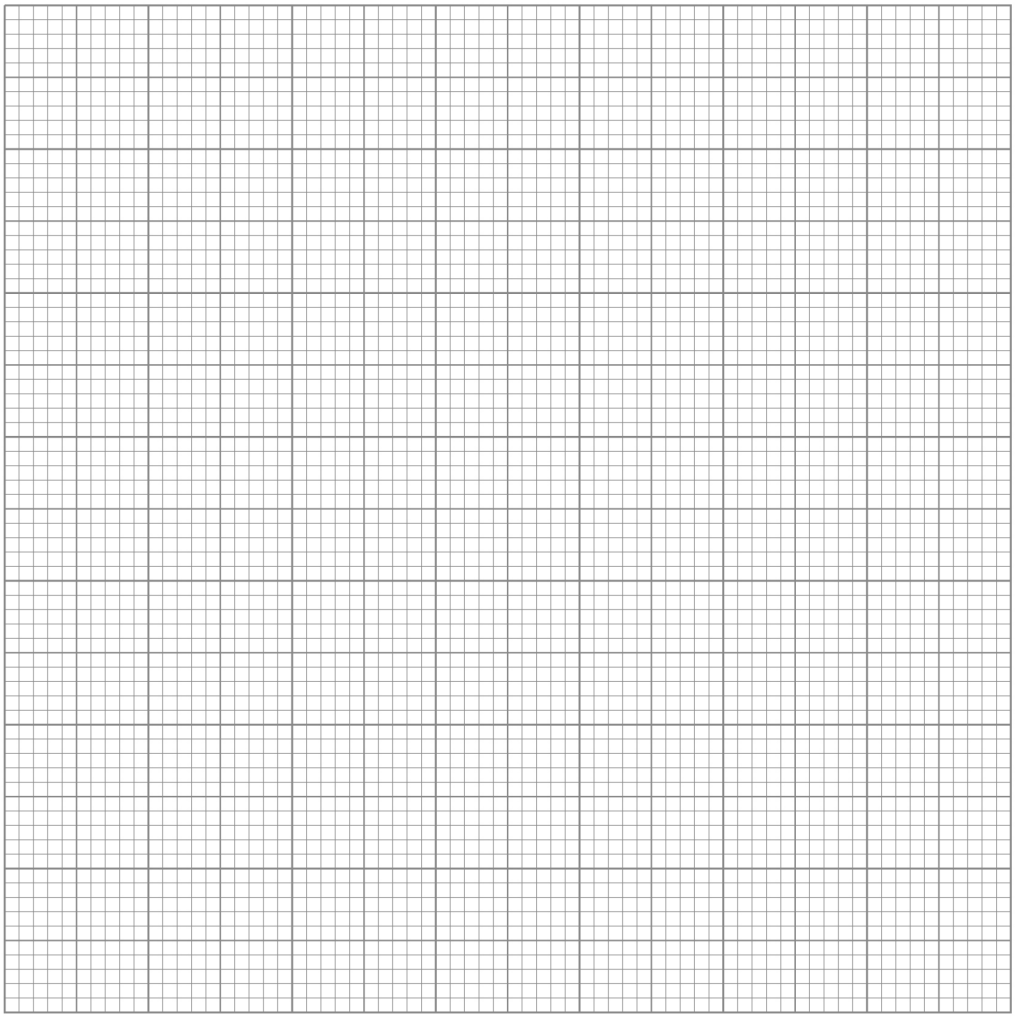
[2 marks]

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1 7 Draw an appropriate scattergram using the data in **Table 1**.

[4 marks]

Title: _____



1 8 Use your scattergram to identify and explain the type of correlation found in the study.

[3 marks]

_____

_____

_____

_____

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1 9 The teacher decided to carry out a follow-up study to see if increased smartphone use causes poor sleep quality.

Explain why an experiment would be a suitable method for her follow-up study.

[3 marks]

30

END OF QUESTIONS

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ANSWER IN THE SPACES PROVIDED

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