



CANDIDATE
NAME

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9990/12

February/March 2023

You must answer on the question paper.

No additional materials are needed.

- Answer **all** questions.
- Use a black or dark blue pen. You may use an HB pencil for any diagrams or graphs.
- Write your name, centre number and candidate number in the boxes at the top of the page.
- Write your answer to each question in the space provided.
- Do **not** use an erasable pen or correction fluid.
- Do **not** write on any bar codes.

- The total mark for this paper is 60.
- The number of marks for each question or part question is shown in brackets [].

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[Turn over

Answer **all** questions.

1 From the study by Pepperberg (parrot learning):

- (a) Alex the parrot was tested for comprehension using three response labels. Two of these were colour and shape.

Name the third response label that Alex could use.

..... [1]

- (b) Alex the parrot had indirect experience of novel (new) objects before the Transfer Tests. This was to reduce a fear response in Alex.

Outline the indirect experience Alex had with novel (new) objects before the Transfer Tests.

.....

 [2]

2 The study by Baron-Cohen et al. (eyes test) revised the 'Reading the Mind in the Eyes' test from the original version.

Describe the original version of the 'Reading the Mind in the Eyes' test.

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 [4]

- 3 Explain **one** problem that could arise if children were used as participants in the study by Milgram (obedience).

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..... [3]

- 4 From the study by Dement and Kleitman (sleep and dreams):

- (a) Participants arrived at the laboratory before their usual bedtime.

Outline the procedure from when a participant arrived at the laboratory until the end of the study.

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..... [4]

- (b) Outline **one** conclusion from this study in relation to eye movement during REM sleep.

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..... [2]

5 From the study by Yamamoto et al. (chimpanzee helping):

- (a) One aim was to investigate whether chimpanzees only help when they can see what another chimpanzee needs to complete a task.

Outline **one** other aim.

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..... [2]

- (b) The results included data from one 'Cannot See' condition and two 'Can See' conditions.

- (i) Outline **one** result from the 'Cannot See' condition.

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..... [2]

- (ii) Outline **one** result from the second 'Can See' condition.

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..... [2]

6 From the study by Laney et al. (false memory):

(a) Describe the background to this study.

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..... [4]

(b) Explain why this study is from the cognitive approach.

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..... [2]

7 Suggest **two** real-world applications based on the study by Bandura et al. (aggression).

Your suggestions **must** be ethical.

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..... [4]

- 8 Two friends, Himmat and Urvi, are discussing the individual and situational explanations for behaviour in relation to the study by Canli et al. (brain scans and emotions). Himmat thinks the study supports the individual explanation but Urvi thinks the study supports the situational explanation.

Explain **one** reason why Himmat is correct and **one** reason why Urvi is correct, using evidence from this study.

Himmat (individual explanation)

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Urvi (situational explanation)

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[6]

- 9 (a) Describe the sample used in the study by Piliavin et al. (subway Samaritans).

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..... [4]

- (b) Explain whether each ethical guideline below was broken in the study by Piliavin et al. (subway Samaritans):

confidentiality

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informed consent

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protection from psychological harm

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right to withdraw

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[8]

- 10 Evaluate the study by Andrade (doodling) in terms of **two** strengths and **two** weaknesses. At least one of your evaluation points **must** be about generalisations.

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