



CANDIDATE
NAME

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CENTRE
NUMBER

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CANDIDATE
NUMBER

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9990/12

February/March 2022

1 hour 30 minutes

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 [].

This document has **12** pages. Any blank pages are indicated.

Answer **all** questions.

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

- (a) Participants were woken at two different time intervals during REM sleep and asked to estimate their dream-duration. One of the time intervals was five minutes.

State the other time interval.

..... [1]

- (b) Name the apparatus used to measure brain activity in this study.

..... [1]

- (c) Outline **one** dream reported by a participant that had horizontal eye movements.

.....

 [2]

2 From the study by Pepperberg (parrot learning):

- (a) Name **two** items that Alex the parrot had to verbally request when he wanted them.

1

 2

 [2]

- (b) Outline **one** strength of this study in relation to reliability.

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 [2]

3 From the study by Bandura et al. (aggression):

(a) Describe the sample used in this study.

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..... [3]

(b) Describe **one** result about aggressive gun play in this study.

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..... [2]

4 From the study by Milgram (obedience):

(a) Describe the shock generator used in this study.

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..... [4]

(b) Suggest **one** real-world application based on this study. Your suggestion **must** be ethical.

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..... [2]

5 From the study by Andrade (doodling):

(a) Outline the aim of this study.

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..... [2]

(b) Explain **one** reason why the procedure was standardised in this study.

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..... [3]

6 The debate about individual and situational explanations relates to the study by Schachter and Singer (two factors in emotion).

Outline what is meant by this debate. Include **one** example from the individual explanation and **one** example from the situational explanation from the study by Schachter and Singer.

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..... [4]

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

Describe the procedure from the point when participants had to view slides in Experiment 2.

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..... [4]

8 From the study by Canli et al. (brain scans and emotions):

(a) Outline how participants were asked to respond to pictures during the recognition test in this study.

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..... [2]

- (b) Two friends, Govinda and Ansh, are discussing this study in terms of validity.

Govinda believes the study does have validity but Ansh believes the study does **not** have validity.

Outline why you think **either** Govinda **or** Ansh is correct, using evidence from the study.

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- 9 (a) Describe the psychology being investigated in the study by Yamamoto et al. (chimpanzee helping).

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..... [4]

- (b) Explain whether each ethical guideline below was broken in the study by Yamamoto et al. (chimpanzee helping):

housing

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numbers

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reward

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species

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..... [8]

- 10 Evaluate the study by Saavedra and Silverman (button phobia) in terms of **two** strengths and **two** weaknesses. At least one of your evaluation points **must** be about self-reports.

[illegible]

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