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| Centre Number | | | | | | Candidate Number | | | | |
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| For Examiner's Use | |
| Examiner's Initials | |
| Question | Mark |
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| TOTAL | |



General Certificate of Education
Advanced Level Examination
June 2010

Critical Thinking

CRIT3

Unit 3 Beliefs, Claims and Arguments

Thursday 17 June 2010 9.00 am to 10.30 am

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| <p>For this paper you must have:</p> <ul style="list-style-type: none"> a copy of the Source Material (enclosed). |
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Time allowed

- 1 hour 30 minutes

Instructions

- Use black ink or black ball-point pen.
- Fill in the boxes at the top of this page.
- 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 maximum mark for this paper is 70.
- This paper consists of **two** sections.
Section A contains questions on a belief, theory or hypothesis.
Section B contains questions based on complex arguments or persuasive texts.
- You will be marked on your ability to use good English, to organise information clearly and to use specialist vocabulary where appropriate.
- The marks for questions are shown in brackets.

Advice

- The recommended time allocation for this unit is as follows:
 - Initial reading: up to 15 minutes
 - Section A: 45 minutes
 - Section B: 30 minutes



J U N 1 0 C R I T 3 0 1

Section A: Beliefs and claims

Study **Documents A, B and C** before answering **Questions 1 to 5** in the spaces provided.

1 Briefly explain why altruism is a 'puzzle' for many scientists.

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(4 marks)

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2 What is the key difference between *biological altruism* and altruism in the more ordinary sense?

Give a pair of contrasting examples which illustrate the difference.

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(4 marks)

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3 (a) Identify **three** pieces of evidence in **Document B** for the theory of Kin Selection as an explanation for altruism in the natural world.

Does the evidence provide convincing support for the theory?

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(5 marks)

3 (b) Walrus have been known to adopt orphans who have lost their parents to predators.

If true, is this claim a problem for the theory of Kin Selection?

How might a supporter of the theory respond to it?

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(3 marks)

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Turn over ▶



4 With the help of **Document C**, identify **one** key difference between the theory of Kin Selection and the theory of Reciprocal Altruism.

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(2 marks)

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5 The theory of Reciprocal Altruism predicts that if organisms act in ways that assist others, they should gain some advantage or benefit in return.

5 (a) What could – and what could not – be reliably inferred about the theory from each of the following? Give a brief explanation for each answer.

5 (a) (i) Many observed instances of organisms assisting others and gaining some measurable advantage for themselves.

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(3 marks)

5 (a) (ii) Some observed instances of organisms assisting others without gaining any measurable advantage for themselves.

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(3 marks)



5 (b) Suggest **one** other prediction – something you would expect to observe – if the theory of Reciprocal Altruism (as described in **Document C**) is correct.

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(2 marks)

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Question 6 refers mainly to the Prisoners' Dilemma, discussed in **Document D**.

6 (a) 'In a single, one-off situation it is arguably a better strategy to act selfishly and inform.' (**Document D**, last-but-one paragraph.)

Give a brief argument or explanation in support of this claim.

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(4 marks)

Question 6 continues on the next page

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6 (b) What support does the Prisoners' Dilemma give to the theory of evolution by Natural Selection?

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(6 marks)

6 (c) What ethical issues, if any, are raised by the Prisoners' Dilemma?
Give a short explanation in support of your answer.

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(6 marks)

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| 16 |

Turn to page 8 for Section B



Turn over for Section B

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ANSWER IN THE SPACES PROVIDED**

Turn over ▶



Section B: Arguments

Questions 7 and 8 are based on the following short text.

A truly altruistic act, such as giving or helping, is one which is performed simply out of kindness: for the sole benefit of others and without consideration for oneself. So-called Reciprocal Altruism is therefore not altruism at all, because it is motivated by the prospect of gaining something in return. Since the only plausible theory we have for displays of kindness in the natural world is Reciprocal Altruism, true altruism does not exist.

7 Give a clear analysis of the above argument, identifying the reasons and conclusion (or conclusions) and explaining the argument structure.

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(8 marks)

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9 Examine the following photograph and accompanying text. Then answer the question that follows.



Rescue workers at 'Ground Zero', 9/11

'The secretaries and financial brokers ran down the stairs; the firemen ran up – 343 of them to their deaths. 95% of those who died were on the upper floors, beyond reach of rescue, and most of those on the lower floors rescued themselves without uniformed help. The grim truth is that the human toll would have been significantly lower had the fire-fighters never entered the buildings.'

Source: SUSAN FALUDI, *The Terror Dream*

Should rescuers risk their own lives, often in vain?

Support your answer with a short, reasoned argument.

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(12 marks)

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| 12 |

END OF QUESTIONS



There are no questions printed on this page

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